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ABSTRACT

A model developed at Metropolitan College of Saint Louis University for assessing the quality of nontraditional education programs is discussed. The concept of quality in relation to individual programs, accreditation, and students is examined. The limitations of the existing definitions of quality and the methods for measuring it are considered. Open systems theory is recommended as the basis for the theoretical foundations of a quality assessment model. For the purpose of assessment at Metropolitan College, education programs are divided into four elements: environment, inputs, programs, and outcomes. The importance of analyzing cost effectiveness is also emphasized. The implementation of the assessment model is described in three stages: preparation, design, and implementation. Implementations, or test strategies utilizing the models are also described. Four pilot studies were carried out concentrating on employers' perceptions of Metropolitan graduates, analysis of the college's costs and finances, student assessment of student services, and graduates' perceptions of the quality of the program. Suggestions for adapting this model to assess other nontraditional programs are provided. Appended are: a statement about Metropolitan College; references for the financial portion of the report; student services evaluation form; survey questions and summary of data for the survey of selected St. Louis employers; Metropolitan College Alumni Survey 1978; and data from the outcomes study. (SF)

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A Model for Assessing the Quality of Non-Traditional Programs in Higher Education

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"It is not enough to insist upon
the necessity of experience, not
even of activity in experience.
Everything depends upon the quality
of the experience."

John Dewey

A MODEL FOR ASSESSING THE QUALITY OF NON-TRADITIONAL PROGRAMS IN HIGHER EDUCATION

Metropolitan College - Saint Louis University
St. Louis, Missouri

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Carl L. Harshman, Ph.D.
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A MODEL FOR ASSESSING
THE QUALITY OF
NON-TRADITIONAL PROGRAMS
IN HIGHER EDUCATION

Executive Summary

The project to investigate the concept of quality in non-traditional programs was developed and carried out through such a program -- Metropolitan College of Saint Louis University. The University, through Metropolitan College, implemented non-traditional baccalaureate degree programs in the fall of 1973. The goals for the project were:

1. To explore and develop the concept of quality in educational programs in order to achieve a better understanding of it.
2. To analyze evaluation methodologies as they might apply to non-traditional programs in higher education.
3. To design a quality assessment model which meets certain stated criteria for the evaluation of non-traditional programs.
4. To test the model on a non-traditional program.

The conceptual, theoretical, and operational components of the quality assessment model as well as four pilot studies carried out as part of the project are included in the report.

Chapter 1: Introduction

This chapter outlines the general problem statement for the project, i.e., how do we define the concept of quality in higher education and how do we determine whether it exists? As background to the question issues about traditional definitions of quality, accreditation, and the non-traditional learner are discussed.

Chapter 2: The Concept of Quality

This chapter contains the results of the application of philosophical analytical techniques to the concept of quality. The brief analysis results in the conclusions that (1) there may be different kinds of quality for a complex phenomenon such as a program and (2) the process of determining quality involves, at a minimum, setting standards, assessing the criteria for the standards, and making some decision about the relationship between the two.

Chapter 3: The Aims and Purposes of Quality Assessment

The project advisory committee was asked to reflect on the limitations of existing (or traditional) definitions of quality and methods of measuring it. In turn, the group developed a set of criteria which the definition and the assessment of quality ought to meet. In general, the criteria allow for variability in the definition of quality. In any case, however, there is a high value placed on the use of quality assessment by the program.

Chapter 4: Theoretical Foundations and the Model for Evaluating Non-Traditional Programs.

This chapter focuses on the theoretical foundations of the quality assessment model. Open systems theory (as applied to organizations) is the basis for conceptualizing the elements of a program (environment, inputs, program, and outcomes). The activities of evaluation are analyzed to derive the information coding and feedback loop component of a system.

The two theoretical areas are then combined through a matrix to create the conceptual model for designing and carrying out the assessment of quality.

Chapter 5: A Definition of Systems Properties: Taxonomies of the Elements of Educational Programs

The model evolves in this chapter through the development of taxonomies to describe the four elements of educational systems or programs (environment, inputs, program, outcomes). Each taxonomy includes major categories, subcategories (as illustrations of the typical components of the category), and suggested sources of information or evidence about the respective category (or quality of its operation).

The taxonomy for environment includes categories for educational components, governmental components, community components, etc. The inputs and outcomes taxonomies are limited to students and their characteristics since the major mission of Metropolitan College is teaching (and not, for example, research). These taxonomies can be expanded in order to apply to more diverse programs. The taxonomy for the program includes the major categories of Mission & Purpose (goals and objectives), Educational Programs and Resources (academic programs and student services), Organization & Management Functions (management, finance, public relations, and evaluation), and Program Functioning (program characteristics and members' feelings).

Chapter 6: Analyzing the Cost and Finances of Non-Traditional Programs

Questions about the financial motives behind the creation and operation of non-traditional programs, the requirement that these programs produce revenues in excess of expenditures, and the questions related to costs and finance were the basis for this chapter.

The chapter includes discussions of the differing perspectives on net revenues, the relationship between pricing and elasticity of demand, the analysis of costs, and revenues and costs in the context of decision-making. The last part of the chapter contains a discussion of the financial elements of the quality assessment model including, for example, economic performance, cash flow, and efficiency in handling revenues and sources of evidence for each element as a function of how things ought to be (the official condition) and how they really are (performance indicators).

Chapter 7: Implementing the Quality Assessment Model

The aim of this chapter is to propose steps for moving the model from theory to practice; that is, how do you apply it to a given program? The process is described in three stages -- preparation, design, and implementation. Proper implementation is dependent upon a steering committee composed of people from a number of areas (inside and outside the institution) and the people involved in the administration of the program. The diversity of people involved helps assure that the model is valid and comprehensive; the involvement of program administrators helps assure that the model is tied to planning and decision-making.

Chapter 8: From Theory to Practice: Testing the Quality Assessment Model

Given the time and resources available, it was not possible to do a comprehensive test of the model as part of the project. Instead, the advisory committee aggreed as a form of a test to conduct four pilot studies.

One study concentrated on the perceptions of non-traditional degree programs in general and Metropolitan College in particular of a sample of employers of the College's students (or graduates). Another study analyzed the costs and finances of the College. Since the College places high priority on its students services, a third study assessed students' perceptions of these services. The fourth study involved a survey of graduates of the College from 1974-76. The study was aimed at assessing the graduates' perceptions of the quality of the program, its relationship to their goals, and the impact of the degree on them.

Quality questions were stated for each study, sources of evidence were selected, collected, and analyzed, and the judgments component of the evaluation was carried out. In this case, the project advisory committee served as the judgments team.

Chapter 9: What's Next?" The Future of the Study of Quality

This chapter serves as the terminal point for the report but as the starting point for future efforts related to the quality of non-traditional programs. The chapter includes sections on the use of the pilot studies in the College's planning and programming, the plans for disseminating the results of this project, and some issues related to adopting the model in other non-traditional (or traditional) programs.

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CHAPTER 1

INTRODUCTION

Discussions and debates about the nature of quality in higher learning are not unique to this decade. Abraham Flexner's critique of the American university published in 1930 represents a classic view of higher education:

> It is gratifying to be able to record the fact that there are American colleges which have not succumbed to nonsense. Harvard--I am now speaking of the college work alone in all the institutions which I am about to name--Yale, Princeton, Swarthmore, Vanderbilt, Amherst, Williams, Barnard, Bryn Mawr, Smith, and Wellesley, to select a small number at random--give no credit toward admission or graduation for any of the absurd courses which I have mentioned; they all offer a varied and solid cultural curriculum to undergraduate students who may care to be educated. No premature or trivial vocational studies confuse the pursuit of the liberal education. Even these institutions are, to be sure, not free from weaknesses--avoidable and unavoidable. They are compelled to accept as college students graduates of the high schools and preparatory schools which are largely ineffective as training institutions; that they cannot help. In the main the student body lacks intellectual background or outlook; that again they cannot help. Their students are in the mass devoid of cultural interest and develop little, for the most part, during their four years at college.[1]

The values which guided Flexner's assessment and judgments about the state of higher learning in America at that time are clear and his criticism touches curriculum, vocationalism, admissions, instruction, the measures of learning, and even the students themselves. According to Flexner there was very little worthwhile in higher education in America save some fortresses of intellect in the east. While many people reached the same conclusion, others were more positive. James Conant Bryant expressed an alternative view when he said:

> Neither the mere acquisition of information or the development of special skills and talents can give the broad basis of understanding which is essential if our civilization is to be preserved. No one wishes to disparage the importance of being "well-informed." But even

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[1] Richard Hofstadter and Wilson Smith (Eds.). American higher education: A documentary history, Volume II (Chicago: University of Chicago Press, 1961.) See "Abraham Flexner Criticizes the American University, 1930," p. 907.

> a good grounding in mathematics and the physical and biological sciences, combined with an ability to read and write several foreign languages, does not provide a sufficient educational background for citizens of a free nation. For such a program lacks contact with both man's emotional experience as an individual and his practical experience as a gregarious animal.[2]

In his notion of curriculum Conant noted that there was nothing new in the educational goals implied; rather, the newness was a result of their application to "a system of universal higher education."

The issues surrounding the roles and functions of higher education appear to be similar during the last quarter of this century. There remain those who prefer a classroom of selected students who experience a classical curriculum provided by traditional scholars. Others find the classical model of higher education to be somewhat inappropriate to the rapidly changing needs of an urban, technological society.

Many modern universities have expanded their roles to include new clienteles. They have chosen to update curricula and to recognize learning experiences where they occur. Because of some of these changes there is a contemporary equivalent to the debates of the earlier part of this century--debates about the quality of higher education, especially about the new forms of higher learning.

A decade ago, many of these new forms were referred to as "non-traditional" educational programs. Because not all aspects were non-traditional or because the traditional became more non-traditional, the term lost popularity and the number of labels for programs increased. Now, there are "external degree programs," "alternative degree programs," "extended degree programs," etc. Regardless of the title, the main issue being debated is whether or not these programs are of sufficient quality to be accepted as a part of American higher education.

There are a variety of approaches represented in the current debate about quality in non-traditional education. Conceptually, extensive definitions of quality and the criteria which are assumed to be measureable facets of quality have been generated. Empirically, the NIE through the Bureau of Social Science Research in Washington, D. C., attempted to measure the "acceptability" and "negotiability" of non-traditional degrees, and examined the effects of earning these degrees on recent graduates. Another approach is illustrated by the project goals of study conducted by the Council on Postsecondary Accreditation (COPA):

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[2] Ibid. See "James Conant Bryant on the Meaning of General Education, 1945," p. 955.

1. To identify the essential elements that should be present in the various types of non-traditional study programs that lead to some form of formal credential for certification of a degree, such as a certificate, associate, baccalaureate, masters and doctorate;

2. To develop a classification of the types on non-traditional study programs;

3. To develop appropriate guidelines, criteria and evaluation procedures for non-traditional educational programs and institutions for use by accrediting commissions and institutions; and

4. To propose policy to be presented to the COPA Board for consideration and adoption to (a) facilitate a more uniform approach by the accrediting commissions in the evaluation of non-traditional educational programs and (b) to assist in the development on non-traditional educational programs.

The outcomes of this project will be of great interest to many institutions.

Finally, there are individual efforts to study the issues involved with quality education. One such effort resulted in the PERC model developed in a project at Empire State College. This amalgam of approaches clearly indicate that issues of quality are of great concern to individual institutions, accrediting commissions, and especially to the consumers of education.[3]

Saint Louis University realized that as an institution sponsoring a non-traditional educational program, it had to take the initiative to help clarify the concept of quality in a practical manner. Concurrently, realistic methodologies and measurement tools needed to be adopted and developed to assess quality, once defined. It was hypothesized that the future of this and other non-traditional programs might rest upon the ability of each institution to analyze and monitor quality internally. A proactive approach to develop and enhance non-traditional education must replace the present reactive stance.

After examining existing definitions of quality it was apparent that the meanings were too limited or too ambiguous to account for many of Saint Louis University's educational concerns. It was also concluded that no single approach or methodology currently being employed to evaluate non-traditional programs was wholly adequate to analyze or evaluate the nature of the University's programs. These findings led to the fundamental questions: What is quality in an educational program?; Is there a universal definition that can encompass heterogeneous program?; How can quality be assessed?

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[3] A separate paper on the relationship between accreditation and quality was written during this project. Due to the length of this report the paper was not included. A copy can be obtained, however, by writing to the author at Saint Louis University.

The commitment at Saint Louis University to its non-traditional program enabled the undertaking of this project. The project was an effort to deal with these issues in a constructive manner with the hope that the findings would be useful to other institutions.

The goals for this project were:

1. To explore and develop the concept of quality in educational programs in order to achieve a better understanding of it.
2. To analyze evaluation methodologies as they might apply to non-traditional programs in higher education.
3. To design a quality assessment model which meets certain stated criteria for the evaluation of non-traditional programs.
4. To test the model on a non-traditional program.

With the help of the Ford Foundation, a group of knowledgeable persons from the field of higher education was assembled in the spring of 1977 to begin preliminary work on the project. After the first few hours of dialogue it was clear that the task was much larger than the budget or the time allotted.

Though no clear resolutions were reached at that time, the group felt that significant progress had been made toward the creation of a comprehensive model for evaluating non-traditional programs. Further, it was agreed that the early work on the model be used as a catalyst for further inquiry and investigation.

Even in its initial state, the model captured some of the important values of non-traditional programs. It was believed that each program should exert some control over the definition and assessment of its own quality, although the program should not necessarily be solely responsible for the final judgments of quality. A second value expressed was that evaluation should be an ongoing activity, not just a prelude to accreditation visits. Thirdly, the model should encourage the use of subjective as well as objective data so that the definition and measurement of quality are not inappropriately restricted. Finally, the nature of the model should encourage the use of both positive and negative results for internal program inprovement.

At the beginning of the project it was not clear what direction the topic of quality in non-traditional programs in higher education would take. As the literature and discussions revealed, there are myriad ambiguities and opportunities. As a result, this effort represents more a journey than a destination; it merely begins the search, not ends it.

A general feeling is that quality in higher education is often taken for granted. With measures like the Carnegie unit and the percentage of Ph.D.'s on the faculty, it is easy to adopt operational definitions of quality. For decades institutions found considerable comfort in equating quality with such factors as the "caliber" of student enrolled, dollars spent per student or on research, or the publication record of the faculty. Had some of the events of the last fifteen years not occurred, we might still be living with the more established notions of quality in higher learning.

The Setting[4]

Saint Louis University, a private, Jesuit, midwestern, urban institution created credit and degree programs for students over 22 years of age in 1973. The programs were initiated through Metropolitan College, the University's continuing education/community service division. The credit and degree programs were a result of the efforts of University administrators and faculty. Committees met; debates took place; and planning occurred for more than two years prior to the initiation of the programs. Even though unanimity about the nature of these programs never developed among the University's faculty, it was felt that there was sufficient consensus to proceed and that to remain inactive would fail to serve a large constituency in the community who wanted and needed more innovative approaches to educating the part-time, adult learner.

Concerns within the committees about the assessment of quality centered on such issues as curriculum requirements, credit for life experience, residency requirements, part-time faculty, and so forth. Many faculty, for example, could not conceive of a program which would grant credit for experiential learning. The program was launched in the midst of these debates, and it received a very positive reaction from the community. Initial enrollments were twice the projections. Since then Saint Louis University has had five successful years of operation.

The concerns and debates about quality did not end with the inception of Metropolitan College's degree programs. Adjustments came about primarily because it was felt that the particular policy or procedure was inappropriate, ineffective or that an important aspect of it had been overlooked in the planning phases. For example, the program for granting credit for life experience was halted, restructured and renamed after it was decided that the procedures were inefficient and that the program was inappropriately labeled. The awarding of credit was based on the learning which resulted from an experience rather than on the experience alone (an important distinction not always made in such programs).

While all of this was occurring, Metropolitan College encountered difficulty with the interpretation of accrediting standards of the American Assembly for Collegiate Schools of Business (AACSB). The College, which awarded a Bachelor of Business Studies degree, was included in the analysis of the University's School of Business when its graduate level programs were reviewed for accreditation. AACSB's standards are written and interpreted in such a way that the College's program data (curriculum, faculty characteristics, etc.) were combined with those of the School of Business and Administration. When the two were combined, the University did not meet the AACSB standards. The result of this experience was that the College stopped admitting students to its business degree program in order that the School of Business' accreditation not be jeopardized.[5] The decision highlighted the real problem--how can a program which does not conform to traditional or established definitions of quality demonstrate that it is in fact succeeding in its mission to educate people?

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[4] Supplementary information on Metropolitan College is included as Appendix A.

The question, of course, is not asked purely out of the experience with the accrediting group. Other institutions and programs are asking the same questions about the quality of non-traditional programs. As the non-traditional programs which have attracted so many older students become the prime competitors with established programs, there will probably be an increase in the concern over quality. In many institutions enrollment will represent a zero-sum game so that one program wins while another loses. As the competition for students increases established programs and faculty may ask non-traditional programs to justify their existence on the basis of more traditional definitions of quality. Finally, programs must take note of the new consumerism among students. The part-time adult learner demands more of the program and is less tolerant of mediocre programming and instruction.

To avoid having more non-traditional programs go the route of Metropolitan College's business degree program, traditional definitions of quality must be challenged and perhaps altered. (This of course, assumes that the degree program had sufficient quality.) At the same time perhaps more established programs should begin to look at their quality and be prepared to answer questions about program goals, how programs relate to goals, and the effect programs actually have. New trends in accreditation are emerging and there is evidence that regional accrediting agencies are becoming more aware of and responsive to the issues of quality in non-traditional programs. Without corresponding and complimentary responses from institutions and programs, however, these agencies will be unable to make much progress.

Although the concerns, experiences, values and responsibilities of the project personnel and consultants have influenced greatly the model and its application, we hope it not only serves as a tool for other institutions and programs but also stimulates new thinking and results which ultimately contribute to the model's improvement.

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[5] There were several options available at the time. One would have been to submit an "experimental design" to AACSB under their option for such programs. This one was not chosen because of perceived time limitations. A second would have been to ignore the standards and proceed independently of AACSB and the School of Business and Administration. This option would probably have jeopardized the School's accreditation status. Finally, the College might have modified its programs to conform to standards. This option would have represented de facto elimination since it would have transformed the College's program into a virtual duplicate of the School of Business' evening degree program.

CHAPTER 2

THE CONCEPT OF QUALITY

Often, the notion of quality in education programs--especially collegiate programs--seems to be universally known and understood. If, in fact, universal consensus existed it would be easy to translate this knowledge into methods for assessing quality. In this chapter some analytic techniques are applied to the concept of quality. The goal is to clarify the concept and, if possible, to establish some guidelines or principles which will help in the development of a quality assessment model.[1]

The word "quality" has different meanings (or is ambiguous in the analytic sense). For example, people speak of a certain quality in a given person or object or that someone has certain qualities. The use of quality in this sense is related to characteristics or descriptors. If we say that a person applying for a job has all the qualities of a good employee, we probably mean that the person possesses certain personal characteristics and/or a relevant employment history which leads to the prediction that he or she will be a good employee.

A second use of quality denotes that a person, object, or experience is evaluated as good or bad, positive or negative. If, for example, a product is said to lack quality, it means that the product is not very good. If an institution's education programs are not of good quality, the implication is that they lack something or that they are poorly conducted.

It is this latter use of the term which seems most appropriate to the issue of quality in non-traditional programs. Discussions of quality essentially equate quality with "good" or "positive", and the lack of quality with "poor" or "bad."[2] The conditions which prevail in reaching the conclusion or in making the judgments are important. First, it appears that certain internal or external standards (criteria) are used to determine whether or not quality exists. Twenty-four carat gold is considered to be of higher quality, judged by price, than ten-carat gold. On the other hand, there are standards of quality which are more complex than those for gold. Examples such as "That is a quality automobile," or "They manufacture a high quality refrigerator," indicate that overall judgments are made, although the grounds for the judgments are not necessarily clear or simple. The automobile may be judged on the basis of price, miles per gallon, accessories, seating comfort and so on. A refrigerator might be evaluated on the basis of expected life, appearance, fixtures (trays, ice-maker), freezer, etc.

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[1] The value of analytic techniques is implied by this chapter and is not expressed in the text. For an explanation of the methodology and for other applications to education see, for example, Jonas F. Soltis, An Introduction to the Analysis of Education Concepts (Reading, Mass.: Addison-Wesley, 1968) or John B. Magee, Philosophical Analysis in Education (New York: Harper & Row, 1971).

[2] There is often a judgmental adjective placed before the word quality as in the phrases "of poor quality" or "has excellent quality."

In the above examples in each case there is an act of judging or deciding. For gold, the higher the carat rating the higher the quality of the gold in terms of price. In the case of a car, the implication "quality equals good" is based on some knowledge about or experience with it.

Correspondingly, the fact that judgments are involved in determining quality implies that there are criteria or standards involved. In the case of gold, the amount of impurity is the standard. For the car or refrigerator there can be numerous standards.

The previous examples shed some light on the relationship of standards or criteria to quality. There can be standards for what goes into something (its contents), how it is put together (its organization or structure), or how well it works (its functioning). Presumably, the same object could have varying degrees of quality depending upon which set of standards is applied. An automobile could contain good materials, but be assembled poorly. The result would probably be a poor quality product. At the same time, if cheap parts are used to assemble cars but the assembly is good, the result may well be a poor quality vehicle. This reasoning leads to the conclusion that although there may be different judgments about quality applied to various components of a product, unless the total product is good or positive, it may not be judged of good quality. The conclusions reached about a product present a situation of necessary and sufficient conditions. In the case of a gold ring or a car, good contents and construction/manufacture, both of which are related to functioning, are all judged as necessary in determining quality; yet, none is sufficient by itself.

If quality ratings can be applied to various components of an object as well as to the whole, then more clarity may come from looking at the activities involved in making decisions about quality. If standards or criteria are always involved in the assessment of quality, the first step toward determining quality is setting standards by which an object (or program) will be judged. The second step is determining the extent to which the standards exist. This step involves some form of assessment. The final step is a judgment (decision) about the existence of quality, i.e., the extent to which the standards are fulfilled. In the case where there is a single standard, the judgment can result from comparing results of assessment to the standard. If, however, the standards cannot be easily translated to measures or if multiple standards are involved, the process of judging is far more complex and difficult than in the case of a single criterion.

In summary, there are at least two uses of the word quality: one of which equates with "characteristic"; the other of which is concerned with the worth (good/bad) of a person, object, or experience. In the case of the latter use, the one with which this study is primarily concerned, there are various kinds of quality--quality of content (what goes into the object), quality of construction (how well it is put together or organized), and quality of function (how well it works). In the course of making judgments about one or more of the types of quality, the following occur: (1) criteria for quality are determined (standards are set); (2) assessment of measures for the standards occurs: (3) judgments are made about the relations between the predetermined standards of their assessments.

The analysis yields two general principles. First, there may be different kinds of quality for a complex product or phenomenon (program) or different components to the notion of quality. Second, determing quality consists, at a minimum, of setting standards, assessing the extent to which the standards exist, and making some decision about the relationship between the two. If these principles are generally accepted as characteristic of the concept of quality, a model concerned with quality assessment should incorporate them.

CHAPTER 3

THE AIMS AND PURPOSES OF QUALITY ASSESSMENT.

In the initial portion of the project, the consultants were asked to reflect on current approaches to or models for assessing the quality of programs including the institutional self-study, program evaluation techniques, etc. Specifically, they were asked to indicate, on the basis of their knowledge and experience, the limitations of existing approaches and, in turn, to develop some general goals or guidelines for a model which would minimize some existing limitations.

The results of this exercise are discussed below. Each statement represents an aim or value for the process of assessing quality. The discussion following each includes the limitations on which the value is based and the rationale for its inclusion.

1) A model for assessing quality should serve the decision-making needs of various constituencies, with those of the institution (or program) having highest priority.

Often energies aimed at determining the quality of education are expended primarily for audiences outside the institution (i.e., accrediting teams) and may or may not serve the needs of internal audiences such as faculty, students, or institutional decision-makers.

The quality assessment process has the potential to affect decisions from the academic department to regional accrediting group or to the federal government. The decision or decisions related to a particular quality assessment effort should be made explicit and priorities should be established among the various decisions. Quality assessment activities should be designed, scheduled and reported according to the goals and priorities established.

2) The model should be flexible and adaptable.

To ask the same or nearly the same questions of all programs and institutions ignores potential differences among them. An approach must be adaptable to various programs and should be flexible enough to fit the needs of a given program. If a pluralistic educational system exists in terms of inputs (different kinds of students), programs (different kinds of institutions), and outcomes (graduates, research, public service), a model must account for these differences. At the same time, there may be standardized portions of the model in order to establish comparability among programs or to insure transportability from program to program.

3) The model should be holistic, i.e., it includes considerations for all aspects of a program.

Many judgments about quality in higher education are based primarily (a) on the existence of certain factors or characteristics in an institution or program (a qualified faculty, a sufficient budget, an admissions procedure, etc.) and (b) on a limited range of outcomes. A holistic model will include considerations about the structure and operation of a program and for its myriad effects on students, *et al*. In addition, the model should expand the notion of data beyond standard organizational information (faculty, curriculum, budget, etc.) to include, for example, community pressures, students' needs, constituencies' perceptions of institutional priorities, etc.

4) The evaluation should be ongoing rather than "one shot" and should include longitudinal as well as cross-sectional data.

Many times an institution or program carries out a flurry of assessment activities in response to a major decision (e.g., accreditation, renewed funding of a grant). As a result, assessment activities often cease after the decision is made. A viable model should consist of a process that is continuous and that serves the major decisions (external and internal) which have priority at any given time. It is assumed that as the continuity of quality assessment increases, the quality will increase in educational programs.

Concurrently, many "one hot" efforts are based on cross-sectional data. It is recommended that longitudinal data bases be established in order to monitor changes over time and to provide better information for linking effects to causes. It is proposed that a model which is ongoing will improve the probability of carrying out longitudinal studies.

5) The model should place a value on and should search for a wide range of positive and negative processes and outcomes.

There is a tendency to limit assessment of quality in two ways: (a) a narrow range of measures are acceptable as evidence in regard to a certain phenomenon (e.g., highest degree and number of publications as a definition of a good faculty member) and (b) there is a tendency to place an undue emphasis on negative findings in order to prove that the evaluation was "worthwhile" (the evaluator perspective) or to present only positive data in order to "look good" (the institutional perspective). The value of an expanded universe of information is that it may provide a more comprehensive picture and, presumably, a more accurate picture of what is actually occurring in or as a result of an institution or program. In addition, the opportunity to identify unintended consequences or impacts increases as the pool of information expands.

On to the second matter, evaluators sometimes place too much emphasis on negative findings; programs and institutions may place undue emphasis on the positive for fear that revealing the negative will result in undesirable consequences. The latter situation is analogous to the researcher who feels that failing to reject the null hypothesis is a poor outcome of the research effort. (This perception is held in spite of the fact that any findings--predicted, inconclusive, or unpredicted--are valuable as contributions to knowledge.) Neither searching primarily for negative factors nor placing an undue emphasis on positive ones necessarily contributes to a better understanding of the program or fosters decisions which lead to the improvement of the program. A model should place an equal emphasis on the positive and the negative, with the positive serving as reinforcer and the negative as stimulus for change.

6) The results of the implementation of the model should be reflected in the institution's or program's planning and decision-making.

That assessment and evaluation can occur and not influence a program comes as no surprise to the experienced evaluator or decision-maker. That it should is a major premise of this effort. A model which is designed to maintain the status quo or which is terminated because of "negative" findings are the concern which stimulate this aim. To ask questions of importance to the program and to act on the judgments which result are important values for a sound quality assessment model. Evidence of the model should be reflected in planning for and the operation of programs.

7) The model should be an integral part of educational programs, not segmented from them.

The model must be integrated with, not exist apart from, educational programs. Questions, quality assessment activities, and results must be tied to various planning, programming, and outcomes decisions. As these linkages emerge the probability that the model will impact the program positively increases.

8) Human and financial resources must be committed to the model; although it is assumed that the resource commitments will not be large and the scope of effort implementation will be limited accordingly.

Most institutions commit few if any resources to quality assessment activities (except at critical judgment points). Although some institutions are concerned, few are willing or, perhaps, able to support "ideal" models given current economic constraints. As a result, institutions which value the process will ordinarily seek means of assessing quality which minimize the extent of resource consumption but maximize impacts of assessment.

9) The model should reflect consideration for the relationship between client/community needs and educational programs.

The appearance of non-traditional programs was/is often justified on the basis of unmet needs. Often, however, there is no attempt to establish the relationship between student/community needs and educational programs. A model for assessing quality should include: (a) analysis of current needs, (b) the relationships between needs and programs, and (c) the extent to which needs are being met.

10) Other considerations for the model:

It should focus on a program's current goals. Often, judgments about quality are based on a set of prior institutional or program goals which have changed over time. The extent to which current goals are identified not only impacts the definition of quality but also affects assessment activities.

The sources of evidence (kinds of data collected) should be be expanded. There seems to be an over-emphasis on demographic data and opinion/ratings. The universe of data is much larger than typically reflected. Traditional data on students such as high school rank, personal demographics, major, percent choosing graduate/professional schools can be supplemented by needs analysis, personal goals data, satisfaction measures, specific knowledge/skills outcomes data, and so forth. This premise can be applied to the entire range of program areas under review in a model.

Persons involved in making decisions about quality should be familiar with what constitutes non-traditional programs. To have persons who are relatively unfamiliar with current trends in higher education involved in the design and conduct of quality assessment is a potential problem. It is assumed that familiarity with such programs will enhance the quality of evaluation and the usefulness of judgments and decisions.

The preceding by no means represent all the possible aims, but they provide a broad spectrum of the values which underly what follows. This exercise only reinforces and, at the same time, clarifies what seemed to be emerging in the literature related to quality:

1. The definition and assessment of quality is primarily a program/institution responsibility although a given model or process may serve decisions at several levels.
2. Historical models of quality assessment are too limited in scope and too short in duration.
3. The assessment of quality has often been an activity appended to an institution rather than a function integrated with it.

As the model for the assessment of quality emerges, there should be some evidence that the limitations of the past are redressed and that the values listed above are manifested.

CHAPTER 4

THEORETICAL FOUNDATIONS AND THE MODEL FOR EVALUATING NON-TRADITIONAL PROGRAMS

The definition and assessment of quality often lead to the use of terms like "system" or "model" to describe the overall approach. These terms usually refer to the assumptions, activities, and even the theories which combine to form the approach or solution to the problem. It may be useful to employ a broader concept such as "paradigm" to describe the scope of the effort. In this case the word *paradigm* is adopted from the works of Thomas Kuhn.[1] In his discussion of the route to "normal science" (which equates to research firmly based on past scientific achievements that a particular scientific community acknowledges as a foundation for further practice), Kuhn noted that certain works or achievements served implicitly for a time "to define the legitimate problems and methods of a research field for succeeding generations of practitioners."[2] According to him such achievements shared two essential characteristics: (1) the achievement was unprecedented to the extent that it attracted a group of practitioners away from competing methods and (2) the achievement was sufficiently open-ended to leave a large number of problems unresolved.

Kuhn refers to achievements which share these two characteristics as *paradigms*. He says that the term is closely allied to his concept of "normal science" and:

> By using it, I mean to suggest that some accepted examples of actual scientific practice--examples which include law, theory, application, and instrumentation together--provide models from which spring particular coherent traditions of scientific research.[3]

What follows is not presented as a revolutionary combination of law, theory, application, and instrumentation. Rather, the project is an attempt to combine assumptions, theory(ies), approaches, and instrumentation into what might constitute a *paradigm* for the study of quality in non-traditional (or all) programs in higher education.

This effort was stimulated by the lack of sufficient methods and implies, if not expresses, that the need for a paradigm is great.

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[1] Thomas S. Kuhn, *The Structure of Scientific Revolutions* (2nd Edition), Vol. 2., No. 2, of the *International Encyclopedia of Unified Science*, edited by Otto Neurath. (Chicago: University of Chicago Press, 1970), p. 10.

[2] Ibid.

[3] Ibid.

Kuhn traces a pattern of scientific development which, except for mathematics and astronomy with roots in prehistoric times, leads him to the conclusion that the first paradigms of science appeared around the seventeenth century. He notes that in the "newer" sciences or branches of some sciences, some universally accepted paradigms appeared very recently. Where the social sciences are concerned, however, Kuhn claims that it is open to question if any has acquired a workable paradigm. The consequences of the absence of a paradigm are not consistent with the techniques of good scientific inquiry according to Kuhn because:

1. All facts pertinent to the development of a particular science appear to be equally relevant;

2. Initial fact-gathering tends to concentrate on the information at hand.

Acknowledging the fact that this project or those like it might not qualify as "science" in the traditional sense, it is nonetheless worthwhile to look at the parallels between 'normal science' and the assessment of quality as well as at the implications of Kuhn's analysis for current problems.

If the literature and case studies are any indication, the approaches to studying quality in higher education reflect many of the limitations noted above. From the self-study approach which allows some freedom in the kinds of data presented to various attempts to define (perhaps narrowly) the concept of quality, different kinds of information often appear equally relevant and the choice of a particular kind of data is oftimes an individual, if not somewhat arbitrary, matter. Probably the most important of the three limitations, when applied to the study of educational programs, is the conclusion that data used are chosen on the basis of what is readily available. If true, this limits by definition the universe of knowledge accessible through the techniques applied and, as will be pointed out later in this report, ignores equally relevant, if not more important, data.

Kuhn's thesis leads to two conclusions. First, there is, at present, no equivalent of the scientific notion of a paradigm which can be universally applied to the study of educational programs when the aim is to assess quality. Second, as a result of this void, the evaluation of programs and assessment of quality is likely to be somewhat random activity which focuses on data easily obtainable and which treats many "facts" as equally important.[4]

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[4] The analogy between Kuhn's analysis of science and the limitations of the lack of a paradigm and the model developed in this project is by no means perfect. For example, where Kuhn cites as a criticism the treatment of various kinds of information as equally important, this project may contend that the kinds of information chosen are inappropriate, i.e., we may treat the wrong information as important in answering certain questions. For example, an historical index of quality of faculty in universities is the degree held, the more Ph.D.s the better. When quality is subdivided by roles--teaching, research, community service--the degree as data may be only one of several kinds available and perhaps not even as important as some others.

In order to counteract these limitations, the study of quality ought to meet certain criteria:

1. The approach should be testable and generalizable to a number of settings;

2. It should include assumptions, theories, applications, and instrumentation;

3. It should solve some existing problems in the issue of the assessment of quality but leave sufficient problems unsolved to attract further work.

If this project accomplishes these objectives, it can be considered a success. The ultimate worth of the effort will, however, depend on (a) its utility and (b) its effect on the quality of non-traditional programs in higher education.

The next section of the report turns to the theoretical bases for the model outlined in the last portion of this chapter.

The Theoretical Bases:

Open Systems Theory and Evaluation Methodology

There are two theoretical bases for the development of the quality assessment model for non-traditional programs. The first comes from the application of open systems theory to organizations and provides the conceptual framework for the program categories in which quality is assessed. The second is an analysis of the literature on program evaluation which leads to a specification of the activities of evaluation. The two theoretical areas--open systems theory and program evaluation activities--combine into a working model for the study of quality.

Open Systems Theory and the Elements of Programs.

An organization is a collection of individuals unified for some common end or ends. According to Katz and Kahn, "All social systems, including organizations, consist of the patterned activities of a number of individuals. Moreover, these patterned activities are complimentary or interdependent with respect to some common output or outcome; they are repeated, relatively enduring, and bounded in space and time ."[5] Organizations operate in a relatively predictable fashion and are orchestrated or regulated in some manner. In addition to the particular character of organizations noted by Katz and Kahn, there are interdependencies among the members of an organization and the organization itself is interdependent with other organizations (or systems).

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[5] Daniel Katz and Robert L. Kahn, The Social Psychology of Organizations. (New York: John Wiley, 1978), p. 20.

Katz and Kahn provide a rationale for classifying organizations as open systems:

> Organizations as a special class of open systems have properties of their own, but they share other properties in common with all open systems. These include the importation of energy from the environment, the throughput or transformation of the imported energy into some product form which is characteristic of the system, the exporting of that product into the environment, and the reenergizing of the system from the sources in the environment.[6]

A rationale for the application of open systems theory to higher education is made by Kessel and Mink. Relying heavily upon Katz and Kahn for theory, Kessel and Mink contend that a systems approach:

1. Will cultivate a clearer understanding of the dynamics and operations of the institution;
2. Will increase effectiveness and efficiency in the control of functioning systems and in the design of new systems in order to reach goals;
3. Helps institutions attain optimum use of resources in reaching goals;
4. Forms and/or expands the information base for decision-making;
5. Promotes relationality within the system as well as reduces confusion and uncertainty.[7]

If the definition of an institution or program as an open system is applicable and if there is some agreement about the value of the systems approach to organizations, then there are grounds for more extensive analysis of the theory in the course of developing a paradigm for assessing quality.

A system is said to be open rather than closed when it in some way is dependent on and interacts with its environment. Pure closed systems, which in the physical world appear to exist in theory only, are said to be totally self-sufficient or self-contained. There are, according to Katz and Kahn, nine characteristics common to all open systems:

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[6] Ibid., p. 33

[7] Vicki Kessel and Oscar G. Mink, An Application of Open Systems Theory and Organization Development to Higher Education: A Position. (Durham, N. C.: National Laboratory for Higher Education, 1971), p. 21, ERIC Document ED 053 701.

1. Systems as cycles of events. All systems go through interrelated cycles of events which are repeated over time.

2. Input. All systems must import (or take in) energy from the environment. All energy or input is in some way related to the system's survival in that it is the substance converted for output or at least is involved in the conversion process.

3. Through-put. This term describes the process(es) of a system which convert(s) input to outputs.

4. Outputs. Outputs are the products of the system's throughput or transformation process. Outputs are exported from the system into the environment.

5. Information input, coding and negative feedback. Open systems constantly receive information from the environment. The information may be transmitted (a) with inputs, (b) through various boundary points, and/or (c) in response to outputs. Portions of the total universe information are selected, coded (for interpretation) by the system, and fed into various components of the system. The most effective of the various forms of information is negative feedback. It is the basis for various changes and adjustments in the system.

6. Dynamic homeostasis. All systems strive to maintain a state of balance or equilibrium. The balance requires attention to the relationship between inputs and outputs as well as to pressures placed on the system by the environment. Wherever a system's equilibrium is disturbed, it will attempt to reestablish the balance by making adjustments.

7. Equifinality. This principle means that there are several ways to accomplish the same goals (create the same output) in a system.

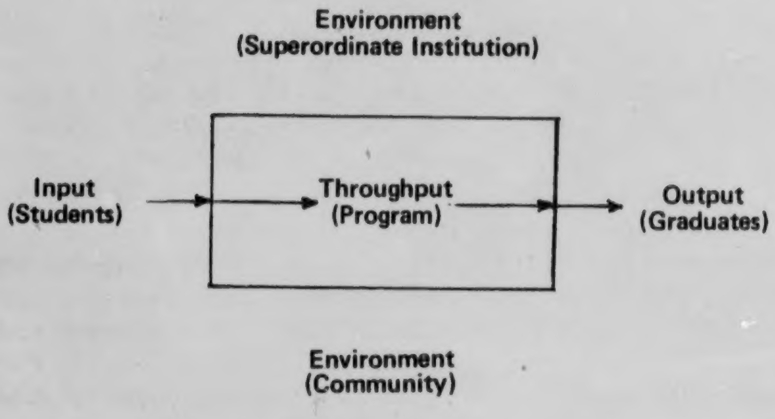
8. Differentiation. All open systems have a tendency toward increased growth and complexity. The result is increased size and more specialization (through subsystems) within the system.

9. Negative entrophy. All physical systems move slowly toward disintegration or death. A social system counteracts this tendency by importing more energy than is needed to create outputs thereby sustaining itself in ways a physical system cannot.

An open system is depicted in Figure 1.

FIGURE 1

THE SCHEMATIC OF AN OPEN SYSTEM



The figure shows the relationship between a system and its environment, as well as the three major system processes.

A basic assumption in the paradigm is not only that open systems theory is useful in understanding the nature of social systems but also that it is helpful in designing a technique for monitoring and improving the system. The appropriateness of, or even the necessity for, such activity is found in the principle of information input, coding, and negative feedback. Information, provided by the environment at the system's boundaries and as one form of input to the system, plays a critical role. It appears that the most critical of the information available is that which conveys negative feedback. Katz and Kahn cite Miller's proposition about negative feedback and its role in system survival: "When a system's negative feedback discontinues, its steady state vanishes, and at the same time its boundary disappears and the system terminates."[8]

Given the essential place of information, input, coding, and negative feedback, the question becomes one of how to design activities and procedures which provide the required or essential information in a form that is useful to the system.

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[8] Katz and Kahn, p. 26

The theory again is helpful in dealing with specific questions of design. Katz and Kahn divide the elements and characteristics of open systems into two categories. One is called the properties of systems. These include: environment, input, through-put, and out The other five characteristics might be labeled principles of operation: negative entrophy, information/coding/feedback, homeostasis, differentiation, and equifinality.

The four properties of systems represent a structure to which the information input, coding and feedback principle can be applied. That is, information can be gathered about the environment, about the inputs to the system, about the through-put processes, and about the outputs of the system. This information, once coded, can be fed back into the system as basis for whatever adjustments (or reinforcements) are necessary.

As a result, this portion of the model is based on the proposition that the monitoring of a system (or the assessment of quality) is grounded in the principle of the information input, coding and negative feedback processes in open systems and that these activities (or this principle) can be organized around (focused on) the properties of systems, i.e., environment, input, through-put, and output.

Evaluation and the Assessment of Quality.

In the previous section, open systems theory is presented as a structure with which to describe the operation of educational programs. This section is devoted to the topic of evaluation as the method for operationalizing the study of quality in non-traditional programs[9] Or, more precisely, evaluation methodology is proposed as a means to operationalize the information input, coding, and feedback processes. The discussion begins with a brief review of the literature on evaluation. This is followed by an analysis of the activities of evaluation. Finally, an approach to evaluation appropriate to this model is presented.

Educational Evaluation: An Overview.

There are a number of adequate reviews of the literature on educational evaluation and it is not necessary to replicate those reviews here. Rather an overview of the field and the implications for the following section on the activities of evaluation will be presented.

Over time there have been at least four general definitions of the concept of evaluation. The measurement movement of the first half of this century influenced one definition (or school) which equated evaluation with measurement. Recently, a publication by Robert Pace entitled "The

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[9] Various works of late include discussion of the distinctions between or among research, evaluative research, evaluation, and program evaluation. No such discussion is included here. Such distinctions are important, but they are not considered critical to this presentation.

Higher Education Measurement and Evaluation Kit," which is a compilation of various measurement instruments, reinforces the notion of evaluation as measurement.[10]

A second general definition of evaluation equates it with professional judgment. This definition is largely a product of the early approaches to school and college accreditation. Then, a team of professional educators would visit a school or college and submit their judgment on the credibility of educational programs. Today, programs are evaluated through the use of single evaluators or teams of evaluators who judge(s) the worth or quality of the program.

A third definition of evaluation involves the comparison of program or performance data with stated (often quantifiable) objectives. The genesis of this approach is attributed to Ralph Tyler's work in the 1940's.[11] According to the literature, Tyler's model is still the basis for several approaches to curriculum evaluation.

A fourth and more recent definition of evaluation describes it as the means for providing information to decision-makers in order to help them choose among decision alternatives. The most complex and probably the best known work in this area is the Phi Delta Kappa Commission's, Education Evaluation and Decision-Making.[12]

In the reviews of literature on evaluation, there appears to be some confusion between the approaches to and purposes of evaluation. A considerable amount of literature discusses the two as though they were the same, when in one sense it is clear they are not. Anderson and Ball, for example, list six purposes of program evaluation. Three of the six purposes are:

1. To contribute to decisions about program installation.
2. To contribute to decisions about program continuation, expansion, or certification.
3. To contribute to decisions about program modification.[13]

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[10] Center for the Study of Evaluation, Higher Education Measurement and Evaluation Kit, (Los Angeles: UCLA Graduate School of Education, 1972).

[11] Ralph W. Tyler, "General Statement on Evaluation," Journal of Educational Research, XXXV (1942), pp. 492-501.

[12] Daniel Stufflebeam, W. J. Foley, W. J. Gephart, E. G. Guba, R. Hammond, H. O. Merriman, and M. M. Provus. Educational Evaluation and Decision-Making. (Itasca, Il.: Peacock Press, 1971).

[13] Scarvia B. Anderson and Samuel Ball. The Profession and Practice of Program Evaluation (San Francisco: Jossey-Bass, 1979) pp. 14-42.

Worthen and Sanders contend that the touchstone of evaluation is determining the merit of worth of a program.[14] The statements of the purposes of evaluation are more generic than the approaches to evaluation discussed previously.

The purposes of evaluation may be accomplished by one or more of the approaches to evaluation. It is possible, for example, to contribute to decisions about program modification or about the merits of a program through the professional judgment approach, through the information for decisions approach, or through the discrepancy approach. Granted, the various approaches may not be of equal value in a given situation but that does not refute the fact that there are alternative approaches to accomplishing the goals of a given evaluation.

This conclusion has two implications. The first requires a more in-depth look at the aims and purposes of evaluation, especially as they might apply to the assessment of quality. The second is an analysis of the activities of evaluation--the aim is to identify a set of activities common to many or all of the approaches to evaluation.

The Activities of Evaluation.

There are at least three alternatives to specifying the evaluation portion of the paradigm. One is to choose an existing model of evaluation systems conception developed previously. A second alternative is to create a "new" model. A third is to analyze the field of evaluation with the goal of understanding its nature and content. The latter approach was chosen for this project.

The goal of this approach is to identify a set of characteristics and/or activities which exist or occur in the course of doing evaluation. The result will be the specifications for the evaluation component of the paradigm.

Several existing models of or approaches to evaluation were reviewed as background for this analysis. These included the works of Provus[15], Stake[16], Scriven[17], and Stufflebeam, et al.[18].

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[14] Blaine R. Worthen and Jones R. Sanders, Educational Evaluation: Theory and Practice (Worthington, Ohio: Chas. A. Jones, 1973) p. 20.

[15] Malcolm Provus, Discrepancy Evaluation (Berkeley: McCutchan, 1971).

[16] Robert E. Stake, "The Countenance of Educational Evaluation," Teachers College Record, LXVIII (1967), pp. 523-540.

[17] Michael Scriven, "The Methodology of Evaluation," in Robert E. Stake (Ed.), Curriculum Evaluation. American Educational Research Association monograph series on evaluation (Chicago: Rand-McNally, 1967) No. 1.

[18] Daniel Stufflebeam, et al., 1971.

The analysis yielded an extensive list of characteristics and activities:

Delineating (deciding upon) the information to be collected.
Obtaining information (data gathering).
Providing (reporting) information.
Data analysis.
Asking questions.
Determining goals (of a program).
Measurement.
Setting standards.
Judging the worth of a program.
Checking the congruence between (comparison of) goals and performance.
Describing a program (or other facets).
Determining contingencies (relationships).
Interpreting data (information).
Making decisions.

The models reveal that a number of these activities occur in the course of doing evaluation. The different models are a result of the nature and scope of activities involved. The CIPP model, for example, defines evaluation as the process of delineating, obtaining, and providing information for decision-making. There is no explicit role for judgment in the evaluation process (although it may result from it). On the other hand, Scriven maintains that evaluation does not occur until judgment is passed.

One way to make sense out of the differences is to compile and categorize the activities. There seem to be a number of activities which form the basis for subsequent evaluation activities. These include:

Asking (evaluation) questions.
Setting standards or establishing criteria (as basis for judgment).
Identifying the decisions to be made.
Determining values, goals, intentions, etc. (of a program).

The nature of what occurs is a function of the purpose of the evaluation and the model employed.

A second category includes activities related to information specification, collection, analysis and reporting. Among these activities are:

Specifying the data, information, or evidence needed.
Collecting information (data gathering).
Analyzing the data/information/evidence.
Reporting the results of the analysis.

The end result of the above should be what Kunkel calls an "accurate picture" of the particular aspect of the program.[19] It appears that all the activities listed are essential to any evaluation process and that they are likely to occur in the order presented.

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[19] Richard C. Kunkel and Susan A. Tucker, "Overview of Program Evaluation Literature and Introduction to the Perception - Based Theory of Program Evaluation," a paper produced as part of Project Values in the Department of Education at Saint Louis University, April, 1976.

Stopping with the activities above could equate to doing descriptive research rather than evaluation. The distinction between "evaluating" and "describing" according to some, depends upon the third set of activities which includes one or more of the following:

Drawing conclusions.
Giving feedback.
Analyzing causes (contingency analysis).
Estimating worth/determining value.
Making recycling recommendations.

As with the previous two categories these illustrate a pool of related activities which can occur in evaluation.

Three Phases of Evaluation

The preceding analysis yielded three general categories of activity in the conduct of evaluation. These might be summarized as follows:

Foundation Phase. This is the initial phase of any evaluation. In it the guidelines for what is to follow are established and the benchmarks for judgments are identified. If the evaluation is primarily decision-oriented, this phase would focus on identifying the decisions which will be made on the basis of the evaluation. If the evaluation is also (or primarily) concerned with estimates of worth, the initial step involves the articulation of standards or the setting of criteria. A more open-ended approach to evaluation (as opposed to using specifically stated objectives) involves asking questions which guide the evaluation. For example, the question "In what ways does the program influence the attitudes of students?" leaves open the possible outcomes but clearly identifies the area of interest in the evaluation.

Information Phase. The products of this phase are based on the questions asked, criteria established, and/or values which emerge in the foundations phase. In this phase there are four steps: (1) the type (e.g., student) and kind (e.g., questionnaire) of data, information, or evidence needed or desired are specified; (2) methods for collecting the information are stipulated and the collection takes place; (3) the information or data are analyzed and put in a form which accurately describes the variables under study; (4) the results of the analysis are reported to the relevant public(s).

The information phase should result in a fairly comprehensive picture of the concerns (questions, values, criteria) under study. Information should be as objective as possible, but at the same time will undoubtedly reflect the perceptions, experiences, and perhaps the biases of the evaluator.

Judgments Phase. This phase involves at least three steps. The first step is the comparison of the reports from the information phase with the standards identified in the foundations phase. If quantifiable objectives were the basis for the valuation, then the information would be interpreted in the light of the implications of those goals. If questions were asked, then the information should be used to develop answers.

The second step can be called cause-and-effect analysis or contingency analysis. The purpose is to link the conclusions to some element or elements of the system, be they an environmental factor, program element, goal, etc. A conclusion (developed in step one) without a corresponding explanation of the reason for it may be of limited value to program administrators or others trying to learn from the experience. The analysis focuses on the cause or causes of an evaluation outcome and attempts to explain why (and how) various elements combine to produce an effect (or lack of it).

A third step in this phase consists of making recommendations and depends on the purpose or purposes of the evaluation. If the purpose is to monitor a system or program with the aim of improving the way it operates, the recommendations serve as a feedback loop to the system (program) and provide the basis for possible modifications. (It should be noted that there are no limits on the scope of the modifications. They might be directed toward the orientation of the system to inputs, to the structure or function of the program, to its goals, etc.)

If, on the other hand, the primary purpose of the evaluation is to make an estimate (or judgment) of worth or value, the judgment constitutes the final step. A visitation team might recommend that a program be accredited, an advisory committee might feel that a program should terminate, a visiting evaluation team might conclude that a program is operating below standards. Of course, there could be positive judgments for each case.

The creation of the three categories of activity of evaluation concludes this section of the study. The next section outlines the model which is a result of combining the activities of evaluation with the properties of systems (or programs).

The Quality Assessment Model:

The Activities of Evaluation and the Properties of Systems

The quality assessment model is conceptualized through a matrix consisting of the "activities of evaluation" on one axis and the "properties of systems" on the other (Figure 2). The matrix indicates that 'Activities of Evaluation' are applied to any or all of the 'Properties of Systems' categories. A comprehensive evaluation is defined as one which addresses each of the properties with the full range of evaluation activities.

FIGURE 2
CONCEPTUALIZING THE EVALUATION OF NON-TRADITIONAL PROGRAMS

THE ACTIVITIES OF EVALUATION	PROPERTIES OF SYSTEMS			
	Environment(s)	Inputs	Program	Outcomes
Foundation Phase				
Information Phase				
Judgement Phase				

The matrix can be used as an evaluation planning and design tool. For example, if attention focused on the evaluation of environment(s), the first step is to identify goals, set standards, or the like. Second, the sources of information or evidence are chosen. The products of the foundations and information phases would be utilized in the judgment phase of the environmental evaluation. The design strategy would be repeated for each category or property of the system.

The final note concerns the interrelationship of the systems categories. As the evaluation is structured the questions asked, attention should be given to the links between and among evidence selected, and judgments made for each of the categories.

In terms of the sequence of design, if one were to develop an evaluation of a new program, the flow would probably be from left to right--from environment to outcomes. On the other hand, if an evaluation is being structured for an existing program, the design activities may occur for a number of categories simultaneously or in the category of greatest importance at the time.

The next chapter of the report contains the taxonomies created as definitions of the four properties of systems categories. These taxonomies are subsequently used as tools to structure the evaluation.

CHAPTER 5

A DEFINITION OF SYSTEMS PROPERTIES:

TAXONOMIES OF THE ELEMENTS OF EDUCATIONAL PROGRAMS

The next step in constructing the model is to translate the systems theory into a structure applicable to educational programs. The notion of environment translates directly and easily. Inputs can be defined as the different kinds of energy coming into a program (e.g., students, money). The through-put or transformation processes are the program itself. Finally, outputs are equated with the term outcomes, which in this setting includes specific outputs of a system as well as the impacts of the system or program.

The decision to create taxonomies (or classification systems) was based on the need to define what is included in a specific system property category. Also, taxonomies provide definable categories which are useful in the design of evaluation activities. Following the first project meeting, the responsibility for the development of the respective taxonomies and the specification of related measures (discussed later) was assumed by various members of the project team. Each individual or group worked on the respective taxonomy over much of the term of the project. At the final project meeting in July, 1978, the four taxonomies were presented and reviewed. Recommendations were made and the revisions were incorporated. The resulting taxonomies are presented in the following sections.

Environment[1]

An institution of higher education, like all social institutions, exists within an environment consisting of individuals, organizations and other institutions. There is communication or a flow of information between elements of the environment and the program (system). In the case of this project the program is a non-traditional college within a private university. Depending on the definition, the system could be a program within a college or an entire university.

For numerous reasons, many related to effective functioning (if not outright survival) of the program, it is essential that the vehicles for communication between the program and its environment be both open and otherwise effective.

Various elements of the environment will have social, political and/or economic implications for a program and the messages or communication from these elements provide critical information about the environment and the implications of it for the program. Categories in the taxonomy for environment were developed and should be used with this premise in mind.

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[1] Much of the work on this taxonomy was done by Richard E. Peterson of Educational Testing Service (Berkeley office).

An environmental taxonomy which describes the various social-political-economic environments of a college (or program) and which identifies some examples of data for measuring the quality of communication between the college and these components is shown in Figure 3. The taxonomy has four columns:

1. Major Environmental Components. This is a typology--an analytic breakdown--of the major elements that comprise the environment in which an educational program exists. The three general environmental components are: educational, governmental, and community. The categories listed represent definable groups or elements within each general component.

2. Subcomponents. In this column, selected aspects of each major component are listed; to some extent these entries are arbitrary and their use is simply illustrative.

3. Principal Content of Communication to the College. In this column are examples of common "messages" available to the program from the respective environmental components. Again the entries are illustrative, not exhaustive.

4. Sources of Evidence for the Effectiveness of Program/Environment Communication. This column contains examples of sources of data for assessing the effectiveness of communication between each environmental component and the program.

A cursory look at the taxonomy indicates that constant monitoring of all environmental components would require more time and expense than most programs could afford. Such a conclusion should not discourage the monitoring of "messages." It means simply that the system must be selective in the information it codes and processes.

The two major criteria available for selecting which components to monitor are (1) the extent to which the program needs (can use) information and (2) extent of the component's influence on the program. Metropolitan College, for example, needs information about federal assistance to veterans and the status of aid to part-time students. On the other hand, the College has little or no use for information about research funding. The extent of influence means the power the particular component exerts on a program. For Metropolitan College the most powerful influence is probably the University's central administration; for a small private college it might be the board of trustees; for a large state university located in a capital city, the most powerful influence might be the legislature.

The initial use of the taxonomy might be as a guide to an analysis of the relationship between the various environmental components listed (and others that may be appropriate to a particular program) and the program. After eliminating the irrelevant and relatively unimportant components from the list, the others are analyzed for their perceived importance to and influence on the program. In so doing, some priorities should be established. Where time or resources to support the monitoring of all pertinent subcomponents is a problem, a list of priorities will serve as the basis for selecting those which should be monitored first.

The next step is to select the sources of information (or evidence) which the program will monitor. At the federal level it might be useful to have information on the status of legislation; for the community a periodic needs analysis might be in order; for the superordinate administrative unit the written communications from the chief executive officer might be a good source of data.

The sources of information institutions select should be monitored over a designated period of time and the content analyzed to determine the principal direct and indirect messages pertinent to the program. In the case of Metropolitan College, for example, some information from the federal government three or four years ago suggested that a future area of emphasis might be aging or gerontologic education. At about the same time the board of trustees suggested that the College's financial margin could (and should) be larger. Both kinds of information were important. In this case the two might be related, i.e., extending programs in gerontology might positively effect revenues.

Information gathered from the environment can be useful in structuring and in monitoring programs. Identifying the key elements of the program's environment, deciding upon the appropriate forms of information available and actually using the information in the design and operation of the program are the essential components of environmental evaluation.

Inputs[2]

For this model inputs are the people and things which are acted upon by the throughput process and are modified by the educational program. Resources--monetary and others (faculties, staff, etc.)--come into the program in a sense, but they are part of the transformation process itself rather than the target of it. Thus, money and other resources such as staff and materials are included in the program taxonomy portion of this model. Since the primary mission of Metropolitan College is instruction, for which students are the inputs, the taxonomy for this section is only a student taxonomy.[3] Two or three factors are important in developing an

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[2] The work in the students input section reflects the efforts of Oscar T. Lenning of NCHEMS.

[3] The taxonomy could be expanded to include other kinds of inputs such as "knowledge" or "community." This expansion will be necessary for those non-traditional programs which have missions in addition to teaching.

FIGURE 3

THE COLLEGE AND ITS ENVIRONMENT: A TAXONOMY

	MAJOR ENVIRONMENTAL COMPONENTS	SUBCOMPONENTS	EXAMPLES OF KIND OR CONTENT OF COMMUNICATION TO THE COLLEGE	POSSIBLE SOURCES OF EVIDENCE FOR THE EFFECTIVENESS OF COLLEGE/ENVIRONMENT COMMUNICATION
Educational Components	**THE AMERICAN HIGHER EDUCATION ENVIRONMENT** The history and current functioning of American colleges and universities provide a normative context in which individual institutions make decisions and conduct their affairs. Particular types of institutions, such as community colleges or Catholic colleges may have collective missions. Organizations such as accreditating agencies seek to enforce generally agreed-upon norms of good practice.	American colleges and universities: ---Traditions ---Current trends & issues Institutions of the relevant type: ---Traditions ---Current trends & issues Accrediting associations ---Regional ---Specialized	Traditional and current statements of missions of higher education Developments in "steady state", planning, collective bargaining, etc. Jesuit educational philosophy (for example) Emphasis on assessment of outcomes Recommendations concerning educational policy and practice	Purchase by college of major books on higher education Subscriptions to major journals Participation in key associations Attendance/participation by college officials at key meetings Involvement in (awareness of) accreditation association activities Membership in, participation in activities of national association, and evidence of sensitivity to major policy documents
	SUPERORDINATE ADMINISTRATIVE UNITS The most common would be the headquarters of a statewide system, or the parental university of a collegiate subunit. The superordinate unit may be expected to provide overall guidance, general services, and approval of important new program (collegiate) activities.	The president Planning and budgeting Academic affairs Physical facilities Etc.	Mission and goals of superordinate unit Allocation of fiscal resources Approval/disapproval of programs Assignment of faculty Nature and extent of new construction	Comparison of the missions and goals of the two units Participation of college (program) in superordinate unit governance Interviews with officials of both units concerning the quality of intercommunication Correspondence between superordinate and subordinate units.
	EDUCATIONAL INSTITUTIONS IN THE REGION A major element of the context is all the schools, colleges, and universities in the area which are seeking to maintain a share of the markets of the available students.	Elementary & Secondary schools (including adult evening schools) Community colleges Colleges & Universities Proprietary schools Other educational programs (e.g., industry, professional)	Shared information about requirements, programs, etc. Territorial concerns: duplication of programs New options which develop	Analysis of written communications with area schools and colleges Interviews with officials at institutions concerning the effectiveness of inter-institutional communications Participation by the program in an area-wide postsecondary organization
Governmental Components	**THE FEDERAL GOVERNMENT** The federal government, especially since the 1972 Higher Education Act, has increasingly affected colleges and universities, notably through the flow of student aid and funds for research and development. Various accountability and civil rights regulations have created constraints for many institutions.	Categorical institutional aid Student aid programs Manpower development programs Education in the military Health resources development Fund for Improvement of Postsecondary Education National Institute of Education	Funds are available for specified programs Eligibility requirements must be satisfied (e.g., affirmative action) Required accounting for disbursements must be submitted (via "paperwork") Seeking higher education's expertise in solving critical national problems	Evidence of awareness of relevant federal programs and sources of funds Receipt of funds (e.g., grants) sought for new programs or expansion Capability for tracking federal legislation Procedures in place for communicating with federal agencies Recent history of (harmonious) relations with various federal agencies

FIGURE 3 (Continued)

Governmental (Continued)	**STATE GOVERNMENT** Public colleges and universities are funded to a large part by state government. They are therefore subject to some measure of control/direction/coordination from state agencies. A major issue is the extent of autonomy for institutions or campuses.	State legislature State's administrative structure The state . . s postsecondary coordinating body (1201 commissions) Federal programs administered though state agencies	Emphasis on program efficiency; give the taxpayer the most for the dollar spent Statewide planning and coordination are in the public interest Federal funds are available for specific programs; submit proposals State coordinating body policies, rules & regulations	(Same as above for state agencies)
	LOCAL GOVERNMENT Colleges are ordinarily located in local governmental jurisdictions. Often they depend on this government for essential services. "Town" and "gown" values may differ and local government is often the locus for residents' concern about the institution.	City Council City planning/zoning/redevelopment agencies City government agencies with educational missions (e.g.' city recreation) Comparable county (or otherwise defined) agencies	Push for reimbursement in some way for essential services(s) provided Requests for participation in city redevelopment activities Extent to which cooperation is sought in minimizing town/gown problems Seeking institutional expertise in solving local problems	(Same as above for local agencies)
Community Components	**COMMUNITY (NONGOVERNMENTAL) ORGANIZATIONS** Many organizations in a community either conduct educational programs themselves or seek educational services for their members from area colleges and universities.	Businesses and industries Trade unions Community organizations - Cultural/intellectual - Senior adult groups - Service clubs, recreation - Social service organization Mass Media	Request for educational services for members (or employees) Provide credit for learning occurring in non-collegiate institutions	Accessibility of college office to representatives from various community organizations (from interviews with organization representatives) Evidence of the college actively reaching out to community organizations Recent history of provision of educational services to community organizations Participation by the college in "umbrella" community groups
	COMMUNITY INDIVIDUALS Individuals of all ages have diverse learning interests and needs - both vocational and non-vocational, for degree credit not for credit. There are identifiable "client groups." Learning aspirations can be stimulated and the market expanded by the mere fact of a college launching suitable programs.	The community in general (individuals and groups concerned with programs in consumerism, public affairs, personal development, health, etc.) Subpopulations defined by: age, sex, type of occupation, level of education, etc.	Provide educational programs to meet our particular interests and needs	Use of periodic community educational needs survey Use of lay advisory groups Recent history of college (program) efforts to offer programs in response to assessed learning needs of individuals Perceptions of community leaders, groups, and individuals of the extent to which program meets need.
Other	**PROFESSIONAL SOCIETIES** **ALUMNI GROUPS** **ETC.**	The major professions Organizations of people in other occupations Institutions/Programs Alumni	Provide continuing education for our members Conduct special learning programs for alumni	Evidence of regular contact with representatives of professional organizations (e.g., of nurses, engineers, lawyers, etc.) Evidence of responsiveness to alumni interests

FIGURE 4
TAXONOMY OF STUDENT INPUTS

STUDENT INPUT CATEGORY	SUBCATEGORIES	SOURCES OF INFORMATION
Background and Demographics	A. Personal Characteristics (Age, Sex, Race, Socio-Economic Status, Marital Status, Occupation, etc.) B. Prior Experiences and Achievements 1. Occupational 2. Educational 3. Avocational/Extracurricular	Questionnaire, Interview, Educational Records, National Tests (e.g., ACE, ACT, SAT).
Goals and Aspirations	A. Personal (Income, Life-Style, etc.) B. Educational (Degrees, Majors, etc.) C. Career	Questionnaire, Interview, national test data.
Cognitive/Intellectual Characteristics	A. Abilities, Competencies, and Skills B. Levels of Knowledge and Understanding 1. General 2. Specialized C. Study Habits and Attitudes D. Preferred Learning Style	Performance Tests (e.g., SCAT). Performance Tests (e.g., ETS area tests). Questionnaire (e.g., Survey of Study Habits and Attitudes), Interview.
Affective/Non-Cognitive Variables	A. Attitude and Beliefs B. Personality C. Self Concept	Interviews, Questionnaires, Standardized Instruments
Perceived Needs	A. Personal B. Educational	Interview or Questionnaire
Psychomotor Abilities and Competencies	A. Physical Fitness B. Physical and Motor Skills	Basic Fitness Test Standardized Tests (e.g., Crissey Dexterity Test, Spatial Relations Test).

inputs taxonomy. One is the kind of information likely to be needed for planning and programming. Another is the outputs taxonomy; the two should have comparable components if a change measure is important to the program.

Students entering a program can be looked at in terms of characteristics, goals, needs, etc. If the educational program's purpose is to maintain or change the students' status with regard to selected variables, the information available about students at the time they enter a program can be put to a number of uses:

1. Information can be used to identify program needs. For example, a college monitoring the communications (especially writing) skills of entering students over the last few years would probably have altered the writing program.

2. The information can be used to predict potential problems (e.g. dropout rates) and opportunities (e.g. courses needed).

3. The information can be used as baseline data for outcomes (e.g. "value added") studies.

4. The information can be used as feedback to such things as the public information/marketing efforts by the program.

One or more of the above uses normally constitute the rationale for doing an evaluation of inputs.

The student inputs taxonomy has six major categories labeled background and demographics, goals and aspirations, cognitive/intellectual characteristics, affective/non-cognitive variables, perceived needs, and psychomotor abilities and competencies. Each major category is subdivided to create the center column. The right-hand column lists some possible sources of information or evidence for the input categories.

The first task in planning for student input evaluation is to create a profile of entering students. In so doing, it might be helpful to delete atypical students who make up an insignificant portion of the population (such as international students in some programs). Smaller non-traditional programs may need to include two or more entering classes in a study in order to have large enough subgroup sizes for stable analysis. Unless the program has a large number of entering students, it will usually be desirable to include the entire population in the analysis so that an adequate data base is established for longitudinal evaluation, and so that dropouts could be examined as a separate group. An N of 100 or more in any subgroup is desirable for correlational and other types of multivariate analysis. If sampling is to be used, a decision about sampling procedures (e.g., simple random sampling or stratified random sampling) must be made at an early point in the planning process.

Before establishing the foundations of the input evaluative, any constraints on the design of the evaluation should be identified. Constraints might include the resources available, the (academic) and political environment, the attidues of certain staff members, or the lack of staff expertise in this area. (Where the non-traditional program is one of several programs offered by the institution, inputs to, attitudes of, and activities in the other programs are also of concern.)

Next, the foundations of the evaluation should be established with extensive input from the decision-makers who will use the information. Illustrative of relevant input evaluation questions are the following:

1. To what extent have program staff members determined and assessed the needs of various groups of potential learners in the program area? The needs of entering students? How do the characteristics, goals, and needs of the entering students compare to the service area groups and the total adult population in the service area?

2. If there are other programs in the institution, how do the characteristics, goals, and needs of students entering the non-traditional degree program compare to those of students entering the other programs?

3. How do the characteristics, goals, and needs of the entering students compare to those of other postsecondary institutions in the area?

4. Is the number of people served by the program significant?

5. How do the students perceive this program upon entry; what are their expectations of the effect of the program on them?

6. Which entering student characteristics does the college especially want to change? What is the initial status of the entering students on these aspects?

7. How do current programs and structures relate to the abilities, needs, and goals of entering students? Are some outdated? Are new ones needed? Should modifications be considered?

After the foundations of the input evaluation are established the design is formulated including: specifying the information that needs to be collected to answer the questions adequately, determing the best sources of information or evidence, identifying data collection methods and analytic procedures to convert the data to information, and the way the information should be packaged and communicated to others.

Program[4]

In this model the "program" corresponds to the actual system in the theory section. The two are equated because the program will probably possess many or all of the essential characteristics which define a system. The extent to which a program represents a complete system, i.e., one which possesses all relevant subsystems and functions, will depend on the particular setting. It should be noted that the taxonomy for a program is not intended to represent all programs. Rather, it provides a "shopping list" of elements which might make up a program.

The taxonomy (Figure 5) includes four major categories for programs: Mission and Purposes, Educational Programs & Resources, Organization & Management Functions, and Program Functioning. The major categories along with the respective subcategories (second column from the left) are intended to describe a majority of the facets of educational programs. As with the other taxonomies, however, the categories are in some ways arbitrary and illustrative.[5]

The figure contains the categories and subcategories of a program as well as examples of sources of evidence pertinent to each. There are two columns related to evidence. These are a result of the conclusion that any aspect of a program or system can have two dimensions. One dimension is a description of what is intended, the other is what actually occurs. For example, a program plan might contain no enrollment projections (intended condition) while another program's plan contains a 5%/year enrollment increase projections. In actuality, let's assume that the first program's enrollment increased 8% per year over a three year period; the second program's enrollment only increased 5% per year. These are examples of official or intended conditions and the actual outcome. The faculty might be another example. In an official or intended sense, a program can have stated goals or policies for hiring and retaining faculty (e.g., good credentials, long publication record, excellent teaching skills). The program might also have guidelines for delivering quality instruction (e.g., small student/faculty ratio, up-to-date curriculum, technology in teaching). The actual character and quality of the faculty cannot be determined from policies and goals. Data about who is doing what and how well are necessary. Who is hired may be different from who it is said will be hired. How well someone teaches may not correlate with paper credentials. Through instruction, factors such as student:faculty ratios, syllabii, and instructional support systems become active, not just official, phenomenona.

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[4] The conceptual work on this taxonomy was done by Carl L. Harshman. The project consultants were involved in the refinement of the taxonomy.

[5] The taxonomy contains a section called "Finance" (III.B.). For a more detailed discussion of the subcategories and their evaluation, see Chapter 6.

FIGURE 5
A TAXONOMY OF PROGRAM ELEMENTS AND RELATED SOURCES OF EVIDENCE

PROGRAM CATEGORY	CATEGORY DEFINED	OFFICIAL PLAN/ INTENDED CONDITION	ACTUAL FUNCTIONING/ PERFORMANCE INDICATORS
I. Mission & Purpose	A. Goals 1. Environment 2. Input 3. Programs 4. Outcomes	Long Range Plan Program plan, official publication	Annual Report and Statistics 1. Demographic data 2. Class Schedules 3. Compare with traditional program's data 4. Costs and sources of aid
	B. Objectives	Written Plan	Data for criteria in objectives
II. Educational Programs and Resources	A. Academic Programs 1. Degrees & Majors	College bulletins and other literature	Enrollment, student data
	2. Non Traditional Credit Programs (e.g., experiential learning credit)	Program plan, bulletin, other literature	Advisor training, graduates' transcripts
	3. Faculty 4. Learning Resources (library, labs)	Program, plan, bulletin, faculty development plan	Faculty statistics, student data on quality of instruction
	B. Student Services	Bulletin and other official literature	Use of facilities /participation in programs
	1. Admission a. Policy b. Procedures	Policy statements, application form, bulletin	Actual admissions/enrollments, survey of new students
	2. Student Assessment (testing) a. Achievement/Placement	Bulletin, literature	Review of scores, transcripts, etc.
	3. Academic Advising a. Program b. Staff	Bulletin, advisor handbooks, general student literature. Credentials, training program.	Students' perceptions, drop/adds, dropout rate. Supervisor rating, student ratings
	4. Registration	Standard procedure including forms, steps, signatures, etc.	Students' perceptions of convenience, accuracy, etc.
	5. Student Records	Forms and update procedures	Audit for accuracy of update, etc.
	6. Financial Aid	Official literature on types available	Percent eligible vs. receiving, type of aid granted amount awarded each year.
	7. Counseling Services	Student literature, program plan	Use of services, students' evaluation
	8. Career Planning/Placement	Student literature, published procedures	Student use, data on students registered vs. students placed
III. Organization & Management Functions	A. Management 1. Organization/Structure	Organization chart, official position descriptions	Evidence that chart is accurate and that organization works.
	2. Planning	Description of planning process, actual plan	Assessment of participants who do planning, annual report, prior plan.
	3. Personnel Administration	Description of selection procedures, position descriptions, evaluation procedures	Staff generated descriptions (vs. official), evaluation reports, etc.
	B. Finance 1. Performance	Budget for revenues, expenditures, and net	Year-end actual
	2. Record Systems	Accounting system--transactions & ledgers	CPA review
	3. Compensation	Compensation schedule that is fair & equitable and is tied to quantity and quality of effort	Staff turnover, complaint records, survey of employees.
	4. Collections (revenues) & Cash Flow	Collection and deposit schedules and procedures	Accounts receivable, interest accrued, borrowed funds

FIGURE 5 (Continued)

	5. Liquidity	Official plan for handling emergencies	Records of contingency funds
	6. Efficiency in handling revenues	Projection of cost of handling money per dollar of revenue. Market research plans.	Minimal redundancy in the system, cost of creating dollars vs. maintaining system
	C. Public Relations/Marketing		
	1. Market Research	Market research plans	Results of research and effect on programs
	2. Public Relations/Marketing	Statement of position. official plan	List of activities, copies of advertising, evidence of impact
	3. Publications	All publications and literature	Indices of readability, attractiveness. comprehensiveness
	D. Research & Evaluation	Evaluation plan. research studies to be done	Reports, evidence of use in planning and program administration, publications etc.
IV. Program Functioning	A. Program Characteristics 1. Adaptive 2. Individualized 3. Convenient 4. Flexible 5. Innovative 6. Responsive 7. Interacts with other programs & systems 8. Open Communication 9. Concern for Individual	Official statement of desired characteristics (e.g., in a plan, bulletin)	Unobtrusive data, surveys environment (e.g., Institutional Functioning Inventory Institutional Goals Inventory
	B. Member's Feelings 1. Satisfaction 2. Pride 3. High Morale	Official statement of desired feelings (e.g., in a plan, bulletin)	Unobtrusive data, surveys of member's feelings and perceptions (e.g., Institutional Functioning Inventory, College Student Questionnaire)

This taxonomy is used in much the same way as the previous ones. First, the irrelevant portions of the taxonomy are eliminated. There are, however, different ways to interpret the categories. For example, a program may not have a student services component (II.B.) of its own. The students use the institution's centralized services. Both structures would be included and evaluated in similar ways. (In the case where the institution's student services are used, decision-makers from that area should be included in the design of the evaluation.) As the categories are selected and foundations established, the two kinds of evidence are considered and selected for each element.

The evaluation of the program can be designed to judge the merit or worth of: (a) the intended condition; (b) actual performance and/or (c) the discrepancy between the two. The purposes of the evaluation, the questions asked, etc., will determine the design employed.

Outcomes Evaluation[6]

The inputs to non-traditional programs (in the case of Metropolitan College, students and their characteristics) are acted upon by the program in order to produce outputs. In this model, what the program creates and effects are termed outcomes. Outcomes are the results of the program and include outputs (the direct, immediate results of the program) and impacts (the direct and indirect long-term consequences of the program). In general, the program should have considerable influence on the outputs! It is, however, harder to measure long-term educational impacts than outputs at the time of graduation.

Outcomes are often thought of in terms of change (modification, revision, replacement or other alternation of the status quo), but maintenance (stabilization, reproduction, or preservation) outcomes are sometimes just as important (e.g., maintaining competencies through review exercises). In addition people are generally not concerned with serendipitous or unplanned outcomes. Unintended outcomes can, however, be as useful in program planning and improvement as information about intended outcomes. This assertion suggests that outcomes evaluation include general instruments (with specific follow-up as indicated) and opportunities for open-ended responses from those completing questionnaires and being interviewed.

Significant outcomes from non-traditional programs do not just occur for students in the program. Others are affected as well. The superordinate administrative unit is often changed by a program. be impacts on non-student groups such as employers, spouses, or community groups. Figure 6 is a comprehensive list of people, groups and entities

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[6] Work on this section was based primarily on the outcomes project at WICHE/NCHEMS. The section represents significant effort by Dr. Oscar T. Lenning in reducing the NCHEMS work to this project.

FIGURE 6

THE CATEGORIES AND SUBCATEGORIES OF THE AUDIENCE DIMENSION

10. *Individual/Group Clients*—This category refers to persons or groups of persons who are direct clients of the postsecondary education unit of concern and/or their immediate associates, such as family and relatives or peers.
    11. *Students*—Individuals or groups of individuals who currently are enrolled in the program, institution, or system of postsecondary education.
    12. *Former Students*—Individuals or groups of individuals who formerly were enrolled in the program, institution, or system of postsecondary education.
    13. *Family and Relatives of Students or Former Students*
    14. *Peers and Associates of Students or Former Students*
    15. *Faculty*
    16. *Staff Other than Faculty*
    17. *Other Individual/Group Clients*—An example would be an individual who is none of the above but is served by an advisory service offered by the college.
20. *Interest-Based Communities*—This category refers to large groups that are identified as entities working toward a *well-defined interest or mission*.
    21. *Private Enterprise Communities*—Communities where a major purpose is financial remuneration and profit—for example, corporations, small businesses, and farmers.
    22. *Association Communities*—Communities where members belong on the basis of affiliation rather than employment, such as unions and professional societies.
    23. *Government Communities*—Communities designed to administer government regulations and services, such as city hall, state department of education, and legislative communities.
    24. *Nongovernmental/Public Service Communities Other than the Institution Producing the Outcome*—Nonprofit service organizations, such as schools, hospitals, welfare agencies, philanthropic foundations, colleges (other than the college producing the outcome), and research organizations.
    25. *Institution or Institutional Unit Producing the Outcome*—The postsecondary education institution and/or units within that institution that are perceived as the producer/facilitator of the outcome(s) of concern.
    26. *Other Interest-Based Communities*—An example would be an ad hoc coalition task force of representatives from two or more of the above areas.
30. *Geographic-Based Communities*—This category refers to large groups defined on the basis of *functional territorial boundaries*.
    31. *Local Community*—A township, city, county, metropolitan area or other type of locality having particular boundaries. It is not necessarily restricted to the legal or jurisdictional boundary, but the functional one in which the impact of the institution is (or should be) directly and physically felt. The boundaries will vary with the institution/program and outcome of concern.
    32. *The State*
    33. *A Region*—An aggregation of states or parts of states.
    34. *The Nation*
    35. *An International Community*
    36. *Other Geographic-Based Communities*—An example would be a research discovery that affects primarily people living in the coldest latitudes, or where it snows heavily.
40. *Aggregates of People*—This category refers to subpopulations of people *distinguished by particular characteristics that may indicate common concerns, needs or wants*, but who do not necessarily have a common interest or mission, and therefore do not constitute communities.
    41. *Ability Level Subpopulations*—Subpopulations defined according to level of ability/proficiency on general intellectual functioning or specific skills—for example, gifted, typical, disadvantaged, or skilled, semi-skilled, unskilled.
    42. *Age Subpopulations*
    43. *Educational Level Subpopulations*
    44. *Income Level Subpopulations*
    45. *Occupation Subpopulations*
    46. *Physical Disability Condition Subpopulations*
    47. *Race Subpopulations*
    48. *Sex Subpopulations*
    49. *Other Such Aggregates*
50. *Other Audiences*—Examples would be the natural environment that is affected by university-sponsored research (which in turn would be expected to have impacts on audiences such as individuals and communities) and populations of animals (such as the animals affected by efforts to keep depleted species from becoming extinct or by the development of veterinary medicines).

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that are potential outcomes audiences, where audience refers to the "who" or "what" will be affected by the program.

The first step in planning the outcomes evaluation is to determine the audiences of concern (targets of the program). These can be identified through an open-ended discussion or through the use of a list such as Figure 6. Next, the subgroups of concern within an audience should be identified as sources of data. Given students, for example, it might be desirable to examine outcomes as a function of academic major. Similarly, it might be important to examine the outcomes for different occupational, ability, socioeconomic, etc., groups.

Once the groups and subgroups are determined, the sampling methods and sample sizes must be decided. The smallest group should contain an N of 50 for univariate analysis and an N of 100 for correlational, discriminant, and other multivariate analysis. It is desirable to use sampling whenever possible in order to minimize cost (which might allow more outcomes to be examined). Stratification according to subgroups and random selection within strata is recommended. If certain subgroups are unusually small, data for that group in the total stratified sample can be combined with data for the entire subgroup and separate analyses conducted.

Once the grouping and sampling decisions have been made, the foundations (questions, objectives) for the evaluation should be formulated (separately for each group if appropriate). Examples of questions related to student outcomes are:

1. Is the credit awarded easily transferred? Considered comparable to other programs? Accepted by graduate programs?
2. Has the student changed in important respects as a result of the program?
3. Has the program helped the student to relate better to others? To adjust more easily to new situations?
4. Has the program given the student satisfaction?
5. Has the program helped the student obtain and hold a desired job? To do a better job? To receive a salary increase, a promotion, or other recognition? To obtain more responsibility, status or security?

There are myriad ways a program might want students to change (presumably students would also desire the change). A program, however, should give priority to the changes which are most important in order to evaluate these changes in detail. Many people have found the vectors of student change proposed by Chickering to be a useful list from which to choose for traditional age students entering out of high school.[7] His change vectors include Autonomy (emotional, physical, and awareness of independence), Competency (Intellectual, physical, and interpersonal), Identity (Perception and perception of others, perception of self), Integrity (Harmonizing and personalizing values), Interpersonal Relationships (increased tolerance and shift in intimacy), Managing Emotions (impulse awareness and integration of emotions with other behavior), and Purpose (avocational, life style, career).

A more comprehensive list of categories developed at NCHEMS (a) applies as much to older students as younger ones, (b) is stated in neutral terms as much as possible, and (c) has generic terms that facilitate application to non-student groups and other entities such as organizations. This list is shown in Figure 7. Step-by-step procedures for using this list have been developed by Lenning, and for each subcategory a standard definition and sample measures and indicators or provided.[8] If still more detail is needed for any subcategory, procedures for subdiving it are provided. A number of detailed classifications have been developed for some of the subcategories of Figure 7.[9]

At this point, information needed to answer the evaluation questions is identified separately for each outcomes audience. Next, the sources of evidence for this information are selected. Figure 8 includes types of evidence and data sources/collection methods for selected outcomes.

Priority should be given to data that are already available in the institution. Once the available data are considered the focus can shift to the collecting of new data. Where standardized psychometric instruments are used, reliability and validity are the major concerns. For example, if a measure of critical thinking is desired, the Watson-Glaser Critical Thinking Appraisal is a reasonable choice to measure passive critical thinking ability; but, it is not a good choice if the goal is to measure critical thinking ability in managing confrontations and in creating one's own discriminations.

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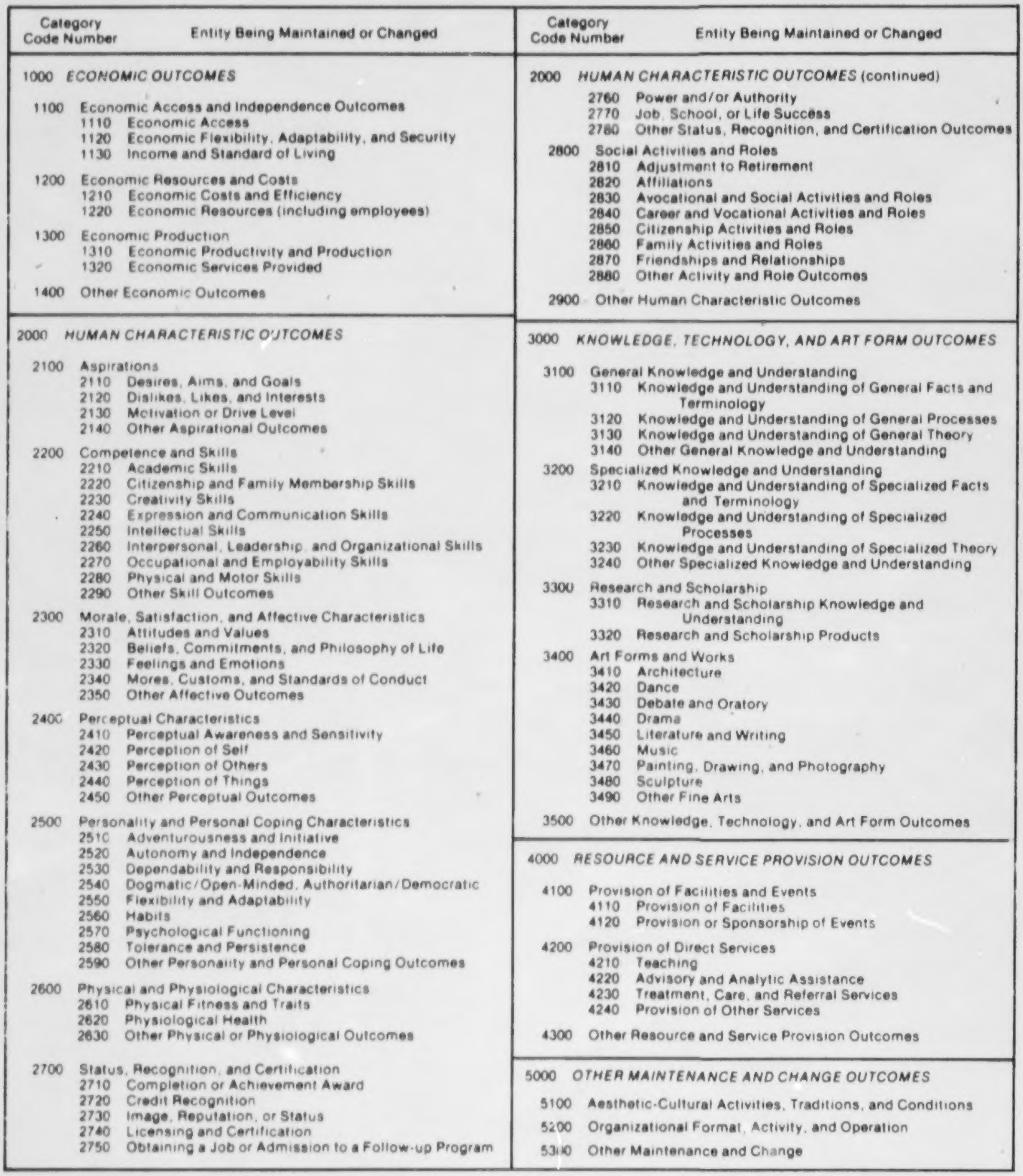
[7] Arthur W. Chickering. Education and Identity. San Francisco: Jossey-Bass, 1969).

[8] Oscar T. Lenning. The Outcomes Structure: An Overview and Procedures for Applying it to Postsecondary Education Institutions (Boulder: National Center for Higher Education Management Systems, 1977).

[9] Oscar T. Lenning, Ong S. Lee, Sidney S. Micek, and Allan L. Service, A Structure for the Outcomes of Postsecondary Education (Boulder: National Center for Higher Education Management Systems, 19?7).

FIGURE 7

CODED LISTING OF THE SECOND- AND THIRD-LEVEL SUBCATEGORIES FOR EACH FIRST-LEVEL CATEGORY OF THE TYPE-OF-OUTCOME DIMENSION[a]



Category Code Number	Entity Being Maintained or Changed
1000	*ECONOMIC OUTCOMES*
1100	Economic Access and Independence Outcomes
1110	Economic Access
1120	Economic Flexibility, Adaptability, and Security
1130	Income and Standard of Living
1200	Economic Resources and Costs
1210	Economic Costs and Efficiency
1220	Economic Resources (including employees)
1300	Economic Production
1310	Economic Productivity and Production
1320	Economic Services Provided
1400	Other Economic Outcomes
2000	*HUMAN CHARACTERISTIC OUTCOMES*
2100	Aspirations
2110	Desires, Aims, and Goals
2120	Dislikes, Likes, and Interests
2130	Motivation or Drive Level
2140	Other Aspirational Outcomes
2200	Competence and Skills
2210	Academic Skills
2220	Citizenship and Family Membership Skills
2230	Creativity Skills
2240	Expression and Communication Skills
2250	Intellectual Skills
2260	Interpersonal, Leadership, and Organizational Skills
2270	Occupational and Employability Skills
2280	Physical and Motor Skills
2290	Other Skill Outcomes
2300	Morale, Satisfaction, and Affective Characteristics
2310	Attitudes and Values
2320	Beliefs, Commitments, and Philosophy of Life
2330	Feelings and Emotions
2340	Mores, Customs, and Standards of Conduct
2350	Other Affective Outcomes
2400	Perceptual Characteristics
2410	Perceptual Awareness and Sensitivity
2420	Perception of Self
2430	Perception of Others
2440	Perception of Things
2450	Other Perceptual Outcomes
2500	Personality and Personal Coping Characteristics
2510	Adventurousness and Initiative
2520	Autonomy and Independence
2530	Dependability and Responsibility
2540	Dogmatic/Open-Minded, Authoritarian/Democratic
2550	Flexibility and Adaptability
2560	Habits
2570	Psychological Functioning
2580	Tolerance and Persistence
2590	Other Personality and Personal Coping Outcomes
2600	Physical and Physiological Characteristics
2610	Physical Fitness and Traits
2620	Physiological Health
2630	Other Physical or Physiological Outcomes
2700	Status, Recognition, and Certification
2710	Completion or Achievement Award
2720	Credit Recognition
2730	Image, Reputation, or Status
2740	Licensing and Certification
2750	Obtaining a Job or Admission to a Follow-up Program
2000	*HUMAN CHARACTERISTIC OUTCOMES* (continued)
2760	Power and/or Authority
2770	Job, School, or Life Success
2780	Other Status, Recognition, and Certification Outcomes
2800	Social Activities and Roles
2810	Adjustment to Retirement
2820	Affiliations
2830	Avocational and Social Activities and Roles
2840	Career and Vocational Activities and Roles
2850	Citizenship Activities and Roles
2860	Family Activities and Roles
2870	Friendships and Relationships
2880	Other Activity and Role Outcomes
2900	Other Human Characteristic Outcomes
3000	*KNOWLEDGE, TECHNOLOGY, AND ART FORM OUTCOMES*
3100	General Knowledge and Understanding
3110	Knowledge and Understanding of General Facts and Terminology
3120	Knowledge and Understanding of General Processes
3130	Knowledge and Understanding of General Theory
3140	Other General Knowledge and Understanding
3200	Specialized Knowledge and Understanding
3210	Knowledge and Understanding of Specialized Facts and Terminology
3220	Knowledge and Understanding of Specialized Processes
3230	Knowledge and Understanding of Specialized Theory
3240	Other Specialized Knowledge and Understanding
3300	Research and Scholarship
3310	Research and Scholarship Knowledge and Understanding
3320	Research and Scholarship Products
3400	Art Forms and Works
3410	Architecture
3420	Dance
3430	Debate and Oratory
3440	Drama
3450	Literature and Writing
3460	Music
3470	Painting, Drawing, and Photography
3480	Sculpture
3490	Other Fine Arts
3500	Other Knowledge, Technology, and Art Form Outcomes
4000	*RESOURCE AND SERVICE PROVISION OUTCOMES*
4100	Provision of Facilities and Events
4110	Provision of Facilities
4120	Provision or Sponsorship of Events
4200	Provision of Direct Services
4210	Teaching
4220	Advisory and Analytic Assistance
4230	Treatment, Care, and Referral Services
4240	Provision of Other Services
4300	Other Resource and Service Provision Outcomes
5000	*OTHER MAINTENANCE AND CHANGE OUTCOMES*
5100	Aesthetic-Cultural Activities, Traditions, and Conditions
5200	Organizational Format, Activity, and Operation
5300	Other Maintenance and Change

[a] The fourth-level categories, into which any of the categories listed here can be divided, are "maintenance" (a fourth digit of "1") and "change" (a fourth digit of "2").

Reprinted from Lenning, Lee, Micek and Service (1977, p. 27) with permission.

Since instruments and data collection methods have different strengths and weaknesses that vary according to the context and type of respondent, it is desirable to use more than one instrument or data collection method whenever it is feasible, i.e., as a function of financial and staff resources available.[10] In addition, it is important to try out new instruments and data collection methods with a pilot group before deciding to use it for a large sample or pouplation. For example, a new instrument currently being tested at several institutions was tested as a tool to collect outcomes information at Metropolitan College. The College found the instrument to be unduly difficult to administer and score given the context. Another consideration in choosing instruments and data collection methods is whether or not the data collected could be useful outside of the evaluation context (e.g., by the students themselves or in counseling and advising the students).

In designing the evaluation study, the data collection and followup activities should be split into manageable segments that can be administered in different years. The emphasis on outcome assessments can shift. While one outcome is being studied in depth, other areas can be monitored until the time for an in-depth study of this outcome. Once decisions about sources of data and data collection have been made, plans for data analysis, interpretation, reporting, and use should be outlined in detail.

Connecting the Taxonomies

The most difficult task may be connecting the various evaluative questions and sources of data. It was noted earlier that environmental data should ultimately be reflected in program structure and operation. In the same manner, when outcomes are analyzed the information from the evaluation of the program will be essential to inferring cause for outcomes (or lack of outcomes).

The ability to visualize the entire system and to see connections among the various elements is no easy task and requires considerable trial and error.

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[10] See, for example, J. Knapp and A. Sharon. A Compendium of Assessment Techniques (Princeton, N. J.: Educational Testing Service 1975).

FIGURE 8

STUDENT OUTCOMES TAXONOMY: TYPES AND SOURCES OF EVIDENCE

GENERAL OUTCOME CATEGORY	SPECIFIC OUTCOME TYPE	TYPE OF EVIDENCE SOUGHT	POSSIBLE SOURCE(S) OF EVIDENCE
I. **Cognitive Development**	A. General Knowledge & Skills 1. Communication Skills & Competencies	Demonstrated improvement or minimum competency in listening, speaking, and writing	Performance tests, faculty observation
	2. Intellectual Competencies	Demonstrated improvement or minimum competency in analytical, evaluative, and synthesis skills	Performance tests (e.g., GRE, Cooperative School & College Ability Tests, Watson Glaser) as well as some of the new "Real Life" instruments.
	3. General Knowledge & Understanding	Demonstrated improvement or minimum competency in knowledge about and understanding of general facts, terminology, processes and theory.	Grades and exam scores in general survey courses, Faculty observations, self reports on questionnaires or in interviews.
	B. Specific Knowledge & Skills 1. Specialized Knowledge	Knowledge of and perspective about the history, theory, practice, activities, and application within a particular field or discipline	Grades and exam scores in specialized courses within a field, faculty observation, standardized performance tests for the field such as the GRE area test and the ETS undergraduate program area and field test.
	2. Specialized Skills	Competency in dealing with the specialized theory, practice, activities, and application within a particular field or discipline	(same as above)
II. **Non-Cognitive, Personal Construct Development**	A. Attitudes, Beliefs, and Values	Clarification of or change in attitudes, beliefs, and values during college	Change of score during or after college on attitude-type inventories like the Allport-Vernon-Lindsey Study of Values, the Inventory of Beliefs, student reports through a questionnaire or in interviews. Programs looking for evidence that change is due to the program.
	B. Purposes & Goals	Reported and observed change in aspirations and goals as a result of attending the program	Change in score on a scale such as Personal Value Inventory, student self report
	C. Self Concept	Reported and observed development of self regard and confidence, change in self image, and better recognition of how others view you as a result of attending the program	Change in score during college on a scale such as the Tennessee Self Concept Scale, student self report
	D. Independence/Autonomy	Shows increased freedom from outside control and influence	Change in score on a scale such as the Omnibus Personality Inventory (Autonomy Scale) observations of faculty, student self report on a questionnaire or in an interview.
	E. Flexibility & Adaptability Openmindedness	Evidence of improvement in adjusting to changing situations, conditions, & circumstances	Change in score on a scale such as the California Psychological Inventory, Flexibility score, observations of faculty, student self report on a questionnaire or in an interview.

FIGURE 8 (continued)

III. Lifestyle Development	A. Economic Development	Income and Standard of living, Geographic mobility and area of residence. Perceived security.	Questionnaire or interview
	B. Career Development	Percentage of graduates obtaining their first full-time job in their field of choice	Student and alumni questionnaire or interview. Questionnaire or interview for employers
		Occupational promotions and advancement reported to have resulted partly because of the program	(same as above)
		New job responsibilities, roles and status contributed to by the program	(same as above)
	C. Avocational Development	Number of avocational achievements and honors	Questionnaire or interviews (graduates & students)
		Reports of avocational activities and roles sought and practiced	(same as above)
IV. Interpersonal Development	A. Skills & Competencies	Percent exhibiting certain skills and changes in certain skills since entrance	Score on interpersonal competency scale, e.g., Chapin Social Insight Scale. Self report of improvement through questionnaire or interviews
	B. Relationships	Reports of effect of the program on interpersonal relationships with family, co-workers, and others.	Questionnaire or interviews (students). Interview with instructors, employer, spouses or parents
V. Psychomotor Development	A. Physical Fitness	Maintenance or improvement of bodily condition while attending the program	Physical fitness test such as Basic Fitness Test
	B. Physical & Motor Skills	Maintenance or improvement of muscular skills such as coordination, dexterity, manipulation, and control	Tests such as the Crissey Dexterity Test, and the Minnesota Rate of Manipulation Test.
VI. Educational Development	A. Satisfaction	Percent who report satisfaction with educational program	Questionnaire or interviews.
		Percent falling into specific retention categories	Student Records
	B. Additional Education 1. Graduate/Professional School a. Acceptance b. Success	Percent accepted and rejected by specific schools For students admitted, the percent succeeding	Follow-up questionnaire (students) correspondence with selected graduate schools

CHAPTER 6

ANALYZING THE COST AND FINANCES OF NON-TRADITIONAL PROGRAMS

The economics of higher education and the nature of non-traditional programs results in high emphasis on finances. Many non-traditional programs, although grounded in a commitment to alternative forms of learning, are dependent upon firm financial footing for survival. To ignore such a fact would overlook a major variable in the future of non-traditional programs. Questions such as: Are non-traditional programs predicated on a positive net revenues basis?[1] Would most non-traditional programs survive if they required financial support from the superordinate administrative unit? There are additional questions directed at the program. The real costs of non-traditional programs, the efficiency of the programs, and the comparison of the economics of these programs to those of more traditional programs are pertinent issues.

Because of the importance of the finances to non-traditional programs, this project dedicated additional effort and a separate chapter to the topic. A conceptual framework for the analysis of finances of non-traditional programs follows.[2]

Conceptual Matters

Differing Perspectives

The costs and finance components of an evaluation model must be sensitive to a variety of issues. The head of a non-traditional program may be interested in the revenue (and level of service) implications of a contemplated change in tuition or the comparative economic efficiency of organizing activities in a different way. Senior officials in a parent institution may want to know:

-- whether or to what extent revenues generated by a non-traditional program represent a net addition to the revenues of the institution;

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[1] A distinction should be made between the costs and finances of programs in public institutions versus those in private institutions. Institutions' budgeting procedures and formula funding for public institutions may make comparisons difficult.

[2] Work on the conceptual framework is primarily a result of the efforts of Dr. John Shea of the Carnegie Council on Policy Studies in Higher Education in Berkeley, California. The author prepared a list of references for this section (Appendix B).

-- whether the program's revenues cover not only direct costs but also a fair share of indirect and overhead costs;

-- whether the non-traditional program is less costly than a traditional alternative.

Public policymakers at the state and federal levels may want answers to questions dealing with the quality of public service, the unmet needs of citizens or the possible duplication of services, interinstitutional coordination, and student financial aid. Finally, students and potential students may want information bearing on the private costs and benefits associated with the various program choices open to them.

Elasticity of Demand

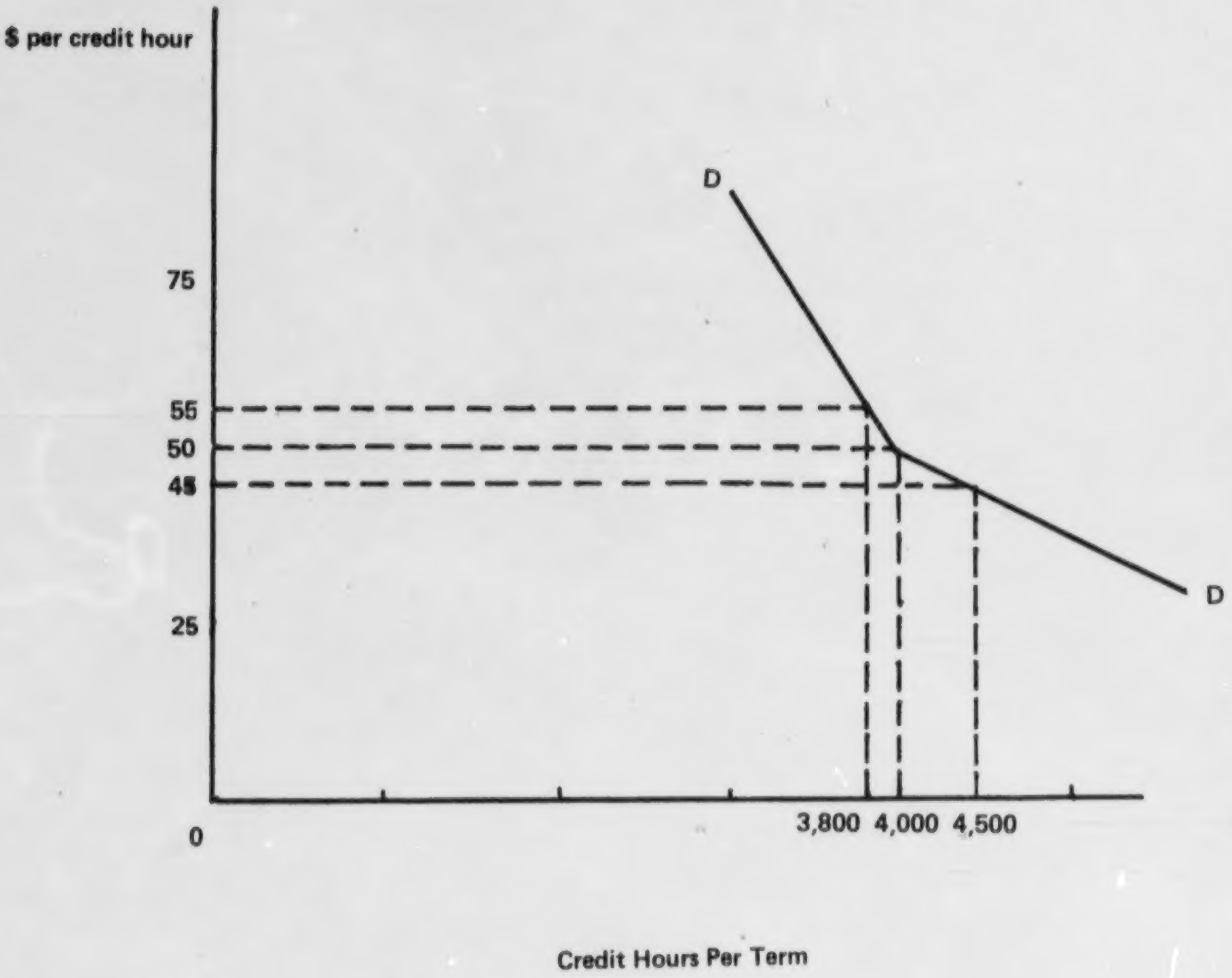
Directors of non-traditional degree programs--and of their parent institutions--generally strive for some quantity and quality of service consistent with revenues equalling costs. In most extended degree programs, including those in the public sector, tuition and required fees generate the bulk of program revenues. Hence, "pricing" policies (tuition charges) are an important policy matter. The options are typically expressed in terms of maintaining existing tuition rates (e.g., $50 per credit) or of increasing or decreasing the rate by a few dollars (e.g., $55 or $45).

What are the implications of a change in price for program revenues? In any particular case, no one can be certain. The effect depends, in part, on what competing institutions would do in response to a change. Critical to the estimation of revenues associated with a possible change in "price" (tuition charge) is what economists refer to as the "price elasticity of demand." If students (and potential students) are "highly responsive" to a price change, a price increase will reduce total revenue (and, of course, service levels), while a reduction in price will stimulate demand sufficiently to increase total revenue. On the other hand, if students (actual and potential) are "not highly responsive" to price, an increase will result in little or no reduction in demand, and total revenue will rise. Similarly a reduction in price, because it will bring forth little additional demand, will lower total revenue.

To be technically precise, demand is said to be "highly responsive" (or price "elastic") if the percentage change in quantity demanded associated with a price change is greater in absolute value than the percentage change in price. Figure 9 can be used to illustrate the concept. The demand line (DD) is a hypothetical description of the number of credit hours for which students would enroll at various prices in the vicinity of $50 per credit hour. The demand line is bent in this illustration, because above $50, it is assumed that competing institutions will follow a price rise. The "flatter line" below $50 assumes other institutions will not follow a price reduction. Continuing this illustration, a 10 percent

FIGURE 9

ILLUSTRATION OF PRICE ELASTICITY OF DEMAND



Quantity	X	Price	=	Total Revenues
3,800	X	$55	=	$209,000
4,000	X	$50	=	$200,000
4,500	X	$45	=	$202,500

increase in price would reduce demand by only 5 percent (4,000 to 3,800 credit hours). Thus, demand is said to be "price inelastic" to a price increase. That is, demand is "not highly responsive." On the other hand, a 10 percent reduction in price, in the hypothetical illustration, is associated with a 12.5 percent increase in demand. Demand below $50 per credit is said to be "relatively elastic" (or, responsive) to a price reduction.

In this illustration, it would make sense to increase price if the program were expected to increase its excess of revenues over costs, or if additional revenues were needed to improve the quality of the service provided. The quantity of service provided would fall, which may or may not be viewed negatively. An increase in price in this illustration would, by itself, increase revenues. And, since there would be fewer credit hours of instruction, some costs would no doubt be lower.

Analysis of Costs

Program expenditures are not synonymous with (direct) operating costs, but are a good first approximation in many instances. In a non-traditional degree program, the cost of providing services is, conceptually, the value of the resources used in the provision of those services. Such resources include faculty time and effort, the use of classroom and other facilities, student services, clerical and administrative help, and the like. In most cases, money is spent to secure the use of such resources in the program, but this is not always true. For example, a program's parent institution may own classroom and office space, the use of which is ignored in fund accounting statements. If the space has an alternative use, then it has value and the cost of using it should not be ignored.

In analyzing costs, several conceptual matters should be kept in mind:

1. As just mentioned, some costs may not be reflected in a fund accounting system, and estimates will have to be developed. It is especially important to recognize such costs, if comparisons of economic efficiency are to be made between programs that differ in the use of such resources.

2. In most cases, prices of resource inputs are a proper reflection of their "true market value"--that is, the amount of money which must be spent to put each unit of resource service to use in a particular program. Salaries (e.g., dollars per course taught), prices of utilities, and other measures are typically available in existing accounting statements. There may be cases, however, where prices understate or overstate "true market values." Where prices are out of line, the usual reason is that subsidies are hidden, or one office or program is overcharged for resource inputs in order to make a budget deficit somewhere else.

3. Are resources used in a program fully employed? If not, higher levels of output (that is greater productivity) may be possible without commitment of additional resources to a program. For example, certain offices in a university are busier at certain times than at others. By judicious rescheduling of work to even out seasonal peaks and troughs, it may be possible to make better use of existing resources. Managers are expected to be aware of under-utilization of a resource so that corrective action may be taken. The existence of "slack" effects the cost of providing new or different services.

4. Some expenditures, such as construction or remodeling of buildings and creation of new programs options, if they result in the creation of tangible or intangible assets with a useful life extending beyond the usual accounting period (one year), require special treatment. Depreciation and obsolescence should be charged against current operations as assets are "consumed." Otherwise, the true cost of providing services is understated.

5. The time frame over which decisions are made will determine the relevance of costs (resource allocations) to program decisions. One must ask: To what extent can resources be put to alternative uses? With fixed commitments, especially in well-established institutional settings, the use of some resources can be altered (put to a different use than at present), but others cannot be--or, can be, but only with great difficulty or at great extra expense. The latter are called "fixed costs." Over the period the use of such resources is fixed, such costs can safely be ignored. Stated differently, only "variable costs" are relevant to decisions.

Revenues and Costs in the Context of Decision Making

Education decisions should never be made solely on the basis of revenues and costs. Yet, education goals and objectives are intertwined with economic considerations, and attention must be paid to both. In using economic information for institution-level decision-making, four points should be kept in mind:

1. The interrelationships between service and financial objectives should be made explicit. Subject to some level of acceptable quality the overarching program objective may be to maximize the level of service (e.g., student credit hours produced), subject to the constraint that program-generated revenues cover direct and indirect costs. Alternatively, the objective may be expressed (in dollars, or as a percentage) as a margin of program revenues over direct costs, subject to a minimum quality constraint. Or, subject to a (minimum) level of net margin, the objective may be to maximize the level of service. Each of these objectives may imply a somewhat

different decision based on whatever objective information and informed judgment are available for analysis of options.

2. "Investment decisions," which by definition involve expenditures which create assets with a useful life extending into the future, are based on a somewhat different decision-making logic. Aside from their justification on educational grounds, the economic worth of investment options depends on whether the "investment" will bring in added revenues and/or reduce operating costs in the years ahead. If, at some reasonable rate of discount, the present value of future benefits exceeds the amount of the investment, the project is worthwhile. Analysis of "investment" options necessarily involves projecting future additions to revenue (or reductions in operating costs), taking risk into account, and so forth. Standard accounting systems in colleges and universities generally reveal little about tangible assets (e.g., buildings and equipment) and nothing about intangible assets (e.g., curricula), except during the year a capital outlay is made. The result is either understatement of current operating costs by neglecting to include depreciation of past investments, or overstatement of such costs in the current period by falsely linking a program improvement to this year's revenues.

3. Even for current operating decisions, rarely will everyday financial accounts and accounting statements be wholly satisfactory. What is needed is managerial accounting, not fund accounting. Fund accounting, designed to guarantee the integrity of financial management, is helpful, but rarely is it fully satisfactory in judging what resources are used for what purposes and for making program decisions. The clearest illustration involves resources for which funds are not currently expended (e.g., depreciation of buildings), but other difficulties should be evident. They include: (a) little or no attention to whether a particular expenditure has an effect, one way or another, on revenues; (b) the absence of information as to whether the cost is "fixed" or "variable" and over what time period and (c) the absence of trend and forecast information, so necessary in making decisions about the future.

4. Finally, a word about context. Above the level of program director, economic analysis is often complicated severalfold because concern extends not to a single program, but to an array of interrelated programs offered by a single institution (or by several institutions). As a result, decisions such as whether to initiate, phase out, expand, or otherwise alter a program, call for analysis of a larger system. The "outputs" from one program may aid a second one.

> Resources may be shared by several programs. Service levels in one program may decline, as those in another expand. New techniques in one program may be emulated by others, and so forth. For this reason, the system must be described carefully, so as to include related programs and institutions--that is, those which conceivably could be influenced by changes in the program under examination.

Financial Elements of the Model

Economic and financial matters are related to managerial functions--planning, organizing, supervising, and evaluating performance--at program, parent institution, and sometimes, higher levels (e.g., a state board or coordinating agency). The major exception to this generalization comes from the students' point of view. Questions students raise typically deal with the private costs and benefits associated with a non-traditional program in comparison with some other use of the students' time and energy:

- -- How much time will the program require, and when?
- -- How much will it cost in tuition and fees? Room and board? Books and supplies? Transportation?
- -- Will the time demands reduce earnings? Time spent working at home? Volunteer activity? Leisure?
- -- Will a third party (e.g., an employer or the Veterans Administration) help finance a portion or all of the private cost?
- -- What benefits are likely to derive from participation in and completion of the program?

Such questions, while of great importance to many "consumers," are not without relevance to policymakers. First of all, many non-traditional programs in higher education seek to serve a new clientele and to schedule activities so as to make participation attractive. Minimizing unnecessary costs to the student (e.g., through imaginative scheduling, registration procedures, etc.) will often add to a program's revenues. Secondly, "foregone earnings" are a cost both to the student and to society (unless employment is widespread), and any global evaluation of program performance can legitimately consider the minimization of such private costs as a societal benefit (in comparison to programs which fail to minimize "foregone earnings").

Looked at in terms of management functions, Figure 10 (a) outlines several categories in the area of "economics and finance," (b) shows illustrative plans or policy statements, and (c) suggests performance indicators (or sources of evidence) to determine whether financial objectives have been reached.

FIGURE 10

ECONOMIC AND FINANCIAL ELEMENTS IN A NONTRADITIONAL (OR EXTENDED) DEGREE PROGRAM, ILLUSTRATIVE OBJECTIVES, AND SUGGESTED PERFORMANCE INDICATORS

CATEGORY	STATED POLICY/OFFICIAL PLAN	PERFORMANCE INDICATOR
1. Economic performance	Budgeted margin of program revenues over direct and indirect costs, including allowance for depreciation. Cost per credit, per FTE student, per degree awarded.	Year-end accounting statement; cost analyses.
2. Economic flexibility	Target ratio of variable to fixed costs.	Record of contracts and moral commitments to continued use of resources.
3. Financial integrity	Statement of fiduciary responsibilities.	CPA review.
4. Compensation practices	Compensation schedule which is perceived as fair and adequate and which draws both desired levels of effort and know-how.	Turnover; salary complaints; unmet classes as a percentage of scheduled class meetings; other unauthorized absences from work.
5. Cash flow	Collection, deposit, withdrawal, and short-term investment schedules and policies.	Schedule of accounts receivable; ratio of non-interest bearing cash balances to monthly expenditures; interest earned on idle funds.
6. Liquidity, contingency management	Official plan for handling financial emergencies.	Speeds of implementation of contingency plans, when and if needed; cost of handling emergencies of various types.
7. Efficiency in handling revenues and expenditures	Target administrative cost of handling each (average) dollar of revenue (or of expenditure).	Examination of possible system redundancies; bad debts as percent of tuition and revenue charges; end-of-year analysis of administrative costs.

Most of the policies and plans shown in Figure 10 and the illustrative "performance indicators" are straightforward and require little or no comment. The major exception is in the area of economic performance, and the reason is that a calculation of program revenues and especially costs is often filled with complexities, as a later section will illustrate.

In any careful analysis of revenues and costs, it helps to begin with a thorough description of the essential parameters of a program. The following questions will generally bring these to light:

1. What goods and services are produced by the program--that is, what are the program's "outputs"? Typical "outputs" for purposes of economic analysis are: (a) credit hours of instruction; (b) credit hours recognized (or granted) on the basis of prior learning; (c) student contact hours in classroom, laboratory, or other settings; (d) number (and average duration) of individual advising sessions; (e) hours of supplementary services provided (e.g., non-credit tutorial assistance); and the like. Depending on the program, other workload (output) measures may include consultation with employees, contacts with the media, requests for information, catalogs distributed, and the like.

2. On what basis and from what sources are revenues derived? What value (price), if any, is attached to units of output? What would students be doing if they were not participating in the program? Would they be enrolled somewhere else? If so, how many would be enrolled elsewhere in the parent institution and on what basis?

3. What activities are undertaken to generate ultimate outputs (e.g., student credit hours of instruction)? How are these activities linked together? Which activities (e.g., public relations, granting credit for prior experiential learning) might add (or subtract) from revenues? What activities or resources (often removed from the academic unit directly responsible for the non-traditional program) are used by the program and its students, and to what extent?

These are the essential first questions, but for a thorough and accurate analysis, it helps to describe the entire program.

There are several practical ways to learn about essential dimensions of a program. One is to talk to the program director and other key program personnel. A second is to read formal descriptions of the program. A third is to begin with the organizational unit with direct responsibility for the program, and carefully analyze the character and operation of that unit and of related units within the same institution which either support parts of the program or utilize some of its resources. For example, one might begin by examining the resources, activities, and outputs of a college, school, or extension division, and then move to an analysis of resource utilization within a parent institution. A fourth way--and, one which provides a somewhat different perspective--is to trace very carefully the sequence of steps through which a student "engages the program" and its supporting elements. In other words, one might, in the case of a non-traditional program in higher education, examine that program from the point of view of a typical (hypothetical) student, and trace the steps through which he or she proceeds from initial awareness of the program to completion and graduation.

If the analyst is not intimately familiar with the program and its organizational environment, it is often helpful to use all four sources of information. The reasons are simple. First, official program descriptions may describe norms (e.g., frequency of academic advising) which are not always honored. By tracing students, this discrepency between the norm and the practice will come to light. Second, program directors in conversation may overlook services or activities which a careful analysis of an organization will uncover.

Summary

The preceding is an overview of the conceptual framework for the analysis of cost and finances of a non-traditional program. This framework will be applied to Metropolitan College as one of the pilot studies for the project.

Chapter 7

IMPLEMENTING THE QUALITY ASSESSMENT MODEL

There are a number of steps in implementing a program for assessing and monitoring quality in the non-traditional programs. The implementation process is described in three stages. The preparation stage is concerned with the creation of an evaluation steering committee and the designation of program staff who, together, design and implement the assessment program. The second stage involves the actual design of the evaluation, scheduling activities, and planning the feedback process. The operation stage is concerned with data collection and reporting activities and the input of information to the judgments process.

The following sections contain an explanation of each stage. The writing style is much more "cookbook" than rhetoric in hope that this style will facilitate reading as well as interpretation.

Preparation Stage

The activities in this stage provide the structure for the design and schedule of activities. The steps in this stage are presented in the approximate order in which they should occur and contain the minimum activities which take place in each.

Step 1. Program Personnel Review the Quality Assessment Model. The model presented in the previous chapters must be analyzed for its relevance to and completeness for the program under study. Since the model represents a framework, the application of the framework is an individual program matter. The scope and depth of the effort are important considerations. Most programs will not be interested in or able to utilize entire taxonomies, nor should they. The taxonomies provide a list of elements to be considered and possible measures related to each.

Step 2. Identify Administrators/Staff Responsible for Decisions in the Program. Much of the groundwork in the design and all responsibility for using quality assessment outcomes rests with the program administrators and staff. The administrators and staff who have program design and/or administration responsibilities should be assigned to work with the project.

Step 3. Select a Steering Committee. This is the group which will give form and substance to the entire effort. The membership of the steering committee should be based on the range of input desired/required for the evaluation. There are three categories of people who might be included on the committee:

1. Institutional Members.

   Central Administrators
   Academic Administrators
   Financial Administrators
   Non-traditional Program Administrators
   Faculty
   Students

2. External Publics

   Alumni
   Business and Industry
   Community Organizations and Groups

3. Technical Experts

   Research/Evaluation Specialists
   Non-traditional Program Specialists

These lists can be expanded and contracted as appropriate to the respective program. From these lists the groups to be represented are selected and specific persons representing each are chosen.

The scope and number of representatives is left entirely to those responsible for committee membership. (Note: The program staff/administrators join the external members of the steering committee for many activities.)

Step 4. Orient Steering Committee to Program. All members of the steering committee must be well informed about the purpose, nature, and functioning of the non-traditional program. They should receive literature and related program information and they need to be oriented formally to the program. (The orientation may be combined with the activity in Step 5.)

Step 5. Orient and Train the Steering Committee in the Quality Assessment Model. Along with an orientation to the program, the steering committee must be oriented to the quality assessment model. This is a key step since useful input and assistance to the process are based on thorough understanding. **An explanation of the** model along with examples (real or hypothetical) is the minimum the committee will require.

Once the steering committee is oriented the activity shifts to the design of the model.

Design Stage

Contrary to the original proposal which had all quality assessment planning focused in the steering committee, current thinking is based on a parallel process in which certain design tasks are initiated in the program and are processed through the steering committee.

In this approach, the initial responsibility for generating questions, sources of data, and schedules rests in the program. The steering committee's role is to review the program's work and to add, delete, or modify as appropriate.

Once the steering committee completes the review of the program's initial efforts, a process is needed to resolve any differences. The two groups might negotiate, the program might choose the final components, or a third party arbitrator might be used.

What follows is a general description of the activities of the design stage of the model. The steps are described without attention to the movement of components between the program personnel and the steering committee. The activities in the design stage will result in a comprehensive evaluation plan and schedule. The activities in this stage are aimed at defining the foundations, information, and judgments phases of the evaluation. In addition the activities produce a master schedule and a calendar of events.

Step 1. The Foundations Phase. This is the point at which evaluation questions are asked or goals are stated. Any number of techniques are available to fulfill this need. A brainstorming session, a survey, the delphi technique or other approach can be used to select quality questions and evaluation goals. Here are some sample questions: How aware is the program of current community needs (environment question)?; How are the characteristics of entering students taken into account in program planning (input question)?; How reasonable is the program's costs: revenues ratio (program question)?; Are graduates satisfied with their experience in the program (outcomes question)? A major factor in deciding upon questions are the decisions to be served by and judgments to be made on the basis of the evaluation. Program personnel and the steering committee must explore the range and importance of decisions involved. Ultimately, the responsibility for choosing the decisions to be served with the program administrators and the institutional administrators.

Once questions are asked, priorities must be set among them. The priorities represent the relative importance of various program and quality decisions. (They also may be influenced by resources, availability of data, etc.) The priorities are used to choose which questions are addressed first, to determine the frequency of data collection, to create a long range schedule, etc.

Step 2. The Information Phase. There are two outcomes of the information phase:

(1) The sources of evidence related to the quality questions are selected. Records, interviews, questionnaires, standardized instruments, etc., are among the means available;

(2) The person or person(s) who will collect and analyze the evidence (data) should be identified.

Although the latter is an administrative matter, the steering committee must be sensitive to objectivity and validity in data collection activities. They might, for example, recommend that some data be collected by program staff while other data would be gathered by outside persons.

Step 3. Establishing a Long Range Schedule. The quality assessment process is ongoing and should not, therefore, be scheduled for only one or two years. In addition, if the process is comprehensive, it will not be possible to carry out all necessary and desirable studies within a one or two year period. The strategy involves a long term schedule, perhaps three to five years. The schedule is constructed on the basis of the decisions to be made, the priorities among questions, and the scope of the assessment activities.

Some studies will be scheduled on an annual (or even more frequent) basis while others might be conducted every two or three years. The importance of decisions related to the assessment and frequency with which the information is needed will influence the evaluation schedule. For example, in Metropolitan College because of strong emphasis on service to students, the assessment of the quality of academic advising services will likely be done on an annual basis. Comprehensive financial analysis (such as the pilot study for this project) may only need to occur every two or three years.

Step 4. Judgments Phase. The final planning activity for this stage is the structuring of the judgments phase. First, a judgments team should be selected. The team may or may not duplicate all or part of the membership of the steering committee. (The decision about the composition of the judgments team might be an agenda item for the steering committee.) Members of the judgments team should be selected on the basis of: (1) interest in the quality of non-traditional programs; (2) ability to make helpful recommendations pertinent to improvement of the program; (3) relationship to the program planning and decision-making processes of the non-traditional program. Superordinate institutional members are important (if applicable). Chief academic and financial officers (or their designates) might be included. One or two authorities on non-traditional programs might be helpful as resources to program modification recommendations. Representatives from critical constituencies (students, faculty, businesses) can be included as appropriate to the particular program. Finally, one or two higher education and research-evaluation specialists should be part of or advisory to the judgments group.

The second task in preparing for the judgments phase of the quality assessment process is to schedule judgments activities. A major judgments session must be held at least once a year. If judgments only occur once a year, the timing should be based on the program's planning and budgeting cycle so that any conclusions and recommendations can be incorporated at the earliest possible time. The process will probably be more effective if at least two judgments sessions are held each year. Two or more meetings would reduce the amount of information processed at each session and make the incorporation of recommendations into programs easier.

The judgments sessions can be chaired by the program's administrator or by someone designated from the group. At the very least, the technical personnel involved should be present and program staff related to the particular area should be invited to participate.

Step 5. Appoint a Coordinator. If someone is not given responsibility for coordinating the quality assessment process, it may die from lack of continuity. The myriad tasks involved require regular attention and the movement of information from the sources through the judgments process necessitates a supporting structure.

A staff member in the non-traditional program (with minimal technical background) could assume coordination responsibility. If the superordinate educational institution has an office of institutional research (or similar entity), this office could manage the evaluation. A third option is to contract the supervision of the process to a third party. For three years, Metropolitan College retained a half-time professional staff person in the role of Coordinator of Research and Program Evaluation. Beginning with the current year, however, evaluation activities are managed by the Center for the Application of Behavioral Sciences, a research and consultation unit in the University's Psychology Department.

Implementation Stage

After planning is completed, the quality assessment process begins. The following constitute the sequence and scope of activities proposed for the implementation stage.

Step 1. Schedule the Evaluative Studies for the Year. Based on the input in the planning stages, the studies to be carried out during the year should be scheduled. The scheduling process should include time parameters for data collection, analysis, and reporting. The entire year should be scheduled at the outset.

Step 2. Preliminary Reports are Prepared. As studies related to various segments are completed, preliminary reports should be prepared. The reports should contain: (1) a list of the questions to be answered by the study; (2) an outline of data collection and analysis procedures; (3) instrumentation; (4) description and analysis of results; and (5) conclusions of the researcher/evaluator. The report(s) should be distributed to the program administrator and members of the judgments team for review prior to the judgments meeting.

Step 3. Hold the Judgments Session(s). The activities in the session may include: a review of the report, elaboration of data available (e.g., inviting staff members or faculty to provide input), drawing conclusions, and making recommendations.

Step 4. Prepare Final Report. A complete record of the judgments meeting should be maintained. The information pertinent to given questions (or decisions) should be incorporated as the final section of the respective report. The final report should be distributed to the program personnel as appropriate and members of the judgments team.

It might be helpful to start a quality assessment log which contains a copy of each evaluation report. Such a log would be useful in historical reviews, accreditation visits, etc.

Step 5. Incorporate Results into Planning and Programming. The key to the entire process is the incorporation of the results of the quality assessment process into planning and programming. This step, of course, depends upon the commitment of the program and its staff to use the process. Not all recommendations will (or should) be adopted in the programs; however, failure to respond to evidence and sound recommendations will undermine the entire quality assessment process.

Step 6. Communicate Results to Constituents. One of the more important follow-up steps is the communication of results to constituents. A mechanism must be developed whereby the outcomes of the studies as well as the improvements (or reinforcements) which result are shared with important publics. This serves several purposes. First, those who provided data (e.g., alumni, students, faculty, etc.) will feel that their contribution was important. Second, the steering committee and judgments team members will have a sense of accomplishment as a result of their efforts. Third, it will provide evidence to important others (superordinate institutional groups, accrediting groups, etc.) that the program is not only concerned about quality but also that it is doing something about it.

CHAPTER 8

FROM THEORY TO PRACTICE:

TESTING THE QUALITY ASSESSMENT MODEL.

The majority of effort in this project was devoted to conceptual and theoretical issues. The practical efforts took the form of four pilot studies. As an alternative we could have focused the time and resources on assessment and analysis of data; however, such an approach seemed to put the proverbial cart before the horse and would have perpetuated the limitations of existing approaches to quality assessment. The first and perhaps most important limitation would have been continued ambiguity of the concept of quality. We assumed that to leave existing definitions of quality unchallenged would represent an error of considerable magnitude. The clarification of the concept was a prerequisite to later efforts.

Open systems theory provided an appropriate scheme within which to describe a program. The activities of evaluation were the means to operationlize the feedback mechanism in systems theory.

Moving from the model on paper to implementation is no easy task. Although the initial proposal reflected an intention to implement (test) the model. It was clear almost at the outset such a commitment would be impossible. As a result, two separate implementations or test strategies were chosen. The first was aimed at doing some pilot studies as part of the project; the second was to test the entire model through implementation in Metropolitan College.

The following sections describe the four pilot studies carried out as part of the project.

Background to the Studies

Since the model was not fully developed at the time the evaluative questions for the pilot studies were asked, it was not possible to employ the development/design components of the model. Instead, two groups of persons were assembled. One consisted of University personnel (the associate academic vice president, a professor of higher education, research psychologist who is also a faculty member in the College, two other College faculty, and the person directly responsible for the credit and degree programs in the College). The second group consisted of persons from the community (a corporate development and training specialist from a multi-national corporation, a civil service training administrator, and the head of a local professional training academy).

The two groups were oriented to the project and informed of progress on development of the model. They were asked for reactions to the model (a number of their recommendations are incorporated in the previous two chapters) and for input to the pilot studies. The plan was to compare the recommendations for important questions from these two groups with the decision-making needs of the College's administration. As it turned out the two were inseparable. Any number of times during the discussion, the College's administrators were asked to provide their views on the importance of a question. At other times the relativity of quality became clear. That is, many view the evaluation (and, hence, quality) process as primarily a function of the University's and College's missions and goals. There was not, by any means, a consensus that certain universal quality indicators exist although there was some consensus about the minimal qualities of an educated person (e.g., writing skills).

Each of the four studies conducted had its primary push from a different group. The project consultants felt strongly about the economics of non-traditional programs and said that if the College's administrators concurred, it would be a good idea to explore this topic. The College's administration and staff were most interested in an evaluation of quality of student services. These services are a priority for the College and represent a major strength (if done well) or weakness (if done poorly). The group of business/community people felt that the employers of the College's students were a key group in the analysis of quality. It was proposed that if employers did not view graduates as having had a quality education, then the program would not survive very long. Finally the University/faculty group was interested in and eventually recommended that the College study its graduates. These people, the group said, represent the major "output" of the College and, therefore, could serve as an important source of evidence for the quality of the education provided.

Once the areas to be studied were selected, the College developed the questions to be asked and, in cooperation with some evaluation consultants, the instrumentation/methodology to be employed. Although the approach to design deviated from the model, this did not adversely affect the results. In a review, however, the project consultants raised questions and made suggestions that might have come to light prior to the studies had the approach in the model been employed.

Another deviation from the model was the judgments component of the evaluation. Because of time limitations and the necessity to deal with related issues, the project consultants and the dean of the College served as the judgments team. It is suggested in the model that judgments team be more broadly based and include as appropriate faculty, students, University administrators, community representatives, etc. In this case, however, the consultants were more than adequate as judges having become familiar with the College and the University over the term of the project. Further, since they were partners in the creation of the model, they understood its application. The major limitation of using a group comprised exclusively of extra-institutional people is that recommendations cannot be made with the sense of a larger context. (The dean was the only "insider" present.) Regardless, the pilot judgments component resulted in conclusions and recommendations that reflect and reflect on the quality of Metropolitan College.

A report on each of the four pilot studies follows. For each study there is a section on the questions asked, the methodology employed, the results, and the judgments/recommendations. The quality questions and judgments sections were written by the author. The results section is a condensation of a longer report prepared by the respective consultant contracted to collect and analyze data.

************************ Student Services ***********************

An important element of Metropolitan College is the student services division. Many programs which serve part-time adult students do so with minimum student support services. Because of the nature of the College, however, these services are given high priority. The services include, in part, the following:

1. A full-time professional staff member who supervises the services in advising, registration, and student records.

2. Part-time professional staff members, who perform advising as part of their function, are available during class hours (evenings and weekends) on campus and at off-campus locations.

3. The College has created and administers internally a mail registration system for the convenience of its students. (The University still operates an in-person, manual registration system.)

The student services are part of the program strategy which addresses goals of access, the absence of certain faculty services available in a full-time day program, etc.

Quality Questions

The student services division of Metropolitan College is responsible for academic advising, registration, publications related to course information, and student records. These services are a critical factor in the success of the College. After some discussion, student records were deleted from the evaluative questions since they are not a major concern at this time. Evaluation questions were developed for each of the other areas:

1. Academic Advising

   To what extent are the available advising services used?

   Do students perceive the desired qualities (ease of access, accurate information provided, helpful, competent advisors) in the advising process?

   Has the quality of academic advising improved over time?

   Is the extensive advising program of value to the students?

2. Course Registration Process

   How closely do students' perceptions of the registration process parallel the College's goals (ease, efficiency, convenience)?

3. College Publication (Registration tabloid)

   How do the students perceive the publication provided for registration and other information (informative, appearance, updating program information)?

4. Satisfaction with Student Services

   How do students rate their overall satisfaction with the College's student services?

These questions provided the foundation for the survey instrument described below.

Methodology

A local evaluator was contracted to work with the College on methodology and instrumentation. After discussion with student services staff about the questions to be asked, an instrument was developed by an evaluator (Appendix C). It was decided that the most effective way to distribute the instrument was through the directors of the four college centers (locations where classes are held). Several classes representing a cross-section of students from the major academic areas (liberal studies, nursing, urban affairs, business) were chosen. The instruments were distributed to students in the classes. The students were asked to drop off the instrument at the staff member's office in the building. (Responses were anonymous.)

Approximately 300 instruments were distributed. Of the instruments returned, 192 were included in the analysis (a couple were blank and one was so incomplete it was judged useless).

The results were analyzed by the evaluator and a summary of findings presented. Demographically, the major area of study for the respondents was as follows:

Business	34%
Liberal Studies	18%
Nursing	23%
Urban Affairs	17%
Other or None	8%

Eight-four percent (84%) of the respondents were employed full-time, nine percent (9%) part-time, and seven percent (7%) reported that they were not employed. About half of the respondents had initially enrolled in the College in 1977 or 1978, the remainder prior to that time. In general, the profile of respondents is consistent with known information about the student body and the results are not questioned on the basis of the demography of the sample.

The results of the student services survey are summarized in Table 1. The data for each continuum were converted to percentages. The results are interpreted in the following section.

Results, Judgments, and Recommendations

In order to save time and space the results of the survey are presented in the chart on the adjoining page. The chart combines the question under investigation (column 1), the conclusions drawn from the results (column 2), and the judgments and recommendations made on the basis of the results (column 3).

Overall the student services evaluation yielded very positive results. The only possible area of concern is academic advising where some students indicate either lack of value or dissatisfaction. The recommendations of import include the possibility of using some day staff in evening duty and for doing some in-depth study of dissatisfied students.

An implication of this study for the next year or so is that a follow-up student services study may not be necessary for two years. Initially it was felt that this area would be evaluated annually. The positive picture may allow the College to focus on other evaluative questions (e.g., curriculum) in the coming year.

*************************** Employers Survey ******************************

With so many of the College's students employed (85-95%) and with so many employers providing tuition assistance (50% of the respondents to the student services survey received some employer tuition assistance), employers of students are an important target population.

In the model employers constitute one environment (or a part of the environment) for the College, albeit an important one. Given the College's orientation, there is a need to assess the perceptions of some employers about (a) Metropolitan College and (b) non-traditional degree programs in general. Information about the latter could serve as a planning tool while specific information about Metropolitan College could be considered a part of the environment monitoring component.

Quality Questions

Three general questions guided this study. They were:

1. How visible and well-known is Metropolitan College to employers of its students?

2. To what extent does education at Metropolitan College help employees in their jobs?

TABLE 1

Results of the Student Services Survey

(N = 192)

Academic Advising

1. Each term I talked with an academic advisor ...

81% about once 13% about twice 6% three times or more

2. The staff who give advice about academic programs appear to be:

Well informed	35%	31%	22%	7%	5%	Relatively uninformed
Easy to get to see	31%	23%	25%	14%	7%	Hard to get to see
Very helpful	32%	32%	24%	7%	5%	Not very helpful
Very competent	30%	31%	20%	14%	5%	Lacking competence

3. Advising staff and procedures are ...

Better than in 76-77	13%	41%	44%	2%	1%	Worse than in 76-77

4. How much of the advising you received was valuable?

7% None 17% A little 12% About half 50% Most of it 13% All of it

Registration

1. The registration process is ...

Efficient	57%	23%	12%	5%	3%	Inefficient
Easy & Simple	62%	25%	8%	1%	4%	Difficult & Complex
Convenient	67%	16%	10%	3%	4%	Inconvenient

College Publication

1. The new College newspaper (is) ...

Informative	28%	20%	38%	9%	5%	Not very informative
Looks professional	19%	42%	31%	7%	2%	Looks unprofessional
Facilitates keeping up with new courses & progress	19%	24%	38%	11%	7%	Does not facilitate keeping up with new courses & progress

Overall Satisfaction

1. Please indicate which member approximates your satisfaction with Metropolitan College's student services.

Extremely	8%	20%	26%	15%	15%	9%	1%	4%	2%	6%	Extremely
Satisfied	10%	9%	8%	7%	6%	5%	4%	3%	2%	1%	Dissatisfied

Evaluation/Quality Question	Conclusions from the Data	Judgments and Recommendations
A. Academic Advising 1. Use of advising services	-Majority of students use advisor only once a term	-Need to know if one use is sufficient for students. -Are advisors underutilized at this visitation rate? -Appears to be active use of the advising system based on percentage of students.
2. Qualities of Advising (ors)	-Majority of students view the advisors as well-informed about college programs. -Although a majority of them felt that the advisor was easy to get to see, about 21% indicated that the advisors were not helpful. -Only 12% of the respondents indicated that the advisors were not helpful. -About 19% of the respondents indicated that the advisors lacked competence.	-Since a number of students find advisors hard to see, consider alternatives to improve access. -Try using some day staff in evening hours to improve access and continuity. -Might try to upgrade competence of advisors
3. Is advising improving overtime?	-Over half those responding (N=96) indicated imrpovement since 76-77. Only 3% said advising had gotten worse.	-Suggest continuing current efforts to improve the advising system.
B. Registration 1. Qualities of the process	-A large percentage respond in the desired directions for ease, convenience, and efficiency.	-Concluded that registration process is reaching goals. Suggest continuation of current system and further attempts to upgrade
C. Publication 1. Qualities of College's tabloid newspaper	-"Appearance" received most positive response (61%) with 31% neutral. "Informative" and "updating" qualities were also viewed positively.	-New publication seems to be received positively. No apparent need for major improvement
D. Overall Satisfaction with student services.	-84% responded from "6" to "10" on the satisfaction scale. Based on comments most dissatisfaction is related to advising and non-student service matters.	-Very positive indication of satisfaction with student services. -Might consider possibility that dissatisfied students withdraw. (Use of exit interview would help test this assumption.)

3. What are employers attitudes toward non-traditional programs in general and Metropolitan College in particular?

The answers to these questions can provide some indication of how well the College performs its function as well as some data from which to do planning.

Methodology

In the Spring of 1978, Metropolitan College conducted a survey of a sample of companies which employ the College's students. Thirty-one companies were chosen for the survey. Each company had from two (2) to twenty-five (25) employees currently enrolled in the College. All companies were in the private sector and employed from 35 to 1,000+ individuals. A telephone interview format was selected to enable collection of qualitative as well as quantitative data.

To facilitate obtaining and arranging the interview, letters were sent to the personnel directors about three days prior to the initial telephone contact. This letter introduced the survey and noted that someone would phone them during a specific time period. The initial call was used to arrange a second time period of about 1/2 hour during which the actual interview would be conducted. This was accomplished with the appointments spread over a week's time.

A twenty-six item instrument was developed to collect data during the interview and only one interviewer was used to maintain consistency. A few comments on the utility and value of the procedure are in order before proceeding. The interview is probably the most difficult of various assessment techniques. The fact that there are no comparative data at the present time limits the possible range of conclusions. There are, however, some general conclusions about the method. A survey instrument would normally be mailed in a situation like this. The expected return rate for surveys is 30% with perhaps 40-50% being the upper limit. The higher rate would be a result of follow-up calls and letters to encourage responses. The present effort resulted in a 68% success rate. Only two companies refused to participate. Eight other personnel managers were unable to participate for various reasons. The interviewer was unable to contact the remaining company. The normal time-line for a mail survey is about three weeks. The total time required for the present survey was only two weeks. This included the initial letter, the first phone call, the actual interview time.

Probably most difficult to judge is the quality of the information obtained. A prime reason for the telephone interview technique was to elicit qualitative information. For the most part, it seems successful. It allowed for a probing approach in at least 75% of the interviews (according to the researcher). The interviewer felt that in over half the interviews information was derived that would not have been obtained through a written survey. The enthusiasm and fervor of some of the responses is a resource that could never be tapped through paper-and-pencil. Finally, several respondents volunteered, at the close of the interview, that they had enjoyed it more and probably been more honest than in a written survey.

Results

The responses to the interview were coded for analysis. Both the items and results are included as Appendix D.

Question: How Visible and Well Known is Metropolitan College?

The responses to questions 1, 2, 4 and 5 seem to indicate that the College and its students are highly visible to the employers. The employers have a fair understanding of the College and have generally positive attitudes about it.

The qualitative responses also support this conclusion. The personnel managers who personally knew students of the College or who knew of them were enthusiastic, both about the education the employees were receiving and about the opportunity afforded students by the non-traditional concept.

Several respondents mentioned that one reason they were unsure who Metropolitan students were was that requests for tuition reimbursement to the company and the transcripts used were from St. Louis University and not Metropolitan College. This meant that employees enrolled among the various undergraduate evening programs of the University all look the same on paper.

Several people remarked favorably about the personal attention given to the students, about responses to requests for information and about guidance, etc., by the faculty and staff of the College. The use of extension campuses was also highly regarded.

The three negative opinions were expressed concerning lower standards for instructors or their courses, all in non-technical, non-applied areas. These criticisms all came from individuals who had had direct experience with students in the College.

Question: How Successful is Metropolitan College in Helping its Students Maximize Their Potential in the Work Place?

As can be seen by the responses to numbers 22, 23, and 25, the College may be having less impact than is desirable. There were only four instances of a graduate who was promoted or transferred laterally in the company. Only one company is aware of an experience with a graduate seeking employment. That applicant was successful. The general lack of success is qualified by several statements made by the respondents. Within a number of companies, most hiring is oriented to either clerical or professional (engineering, architecture, etc.) positions. Also, the larger companies' promotion and transfer procedures often bypass the personnel officer and he or she is therefore unaware of the changes made. Perhaps most significant is the fact that few, if any, graduates leave their companies to seek employment elsewhere. One personnel manager commented that her company would like to see some graduates, but they never had any apply.

Items 11, 18, 19, and 24 indicate that opportunity is available. All the companies have a policy of preference for promoting from within and most said that increasing promotability was one reason for underwriting employee education.

Only 19% of the respondents said that the source of the applicant's degree was considered. This was only in special instances such as agricultural or professional programs neither of which is applicable to Metropolitan College.

Over two-thirds said that hands-on experience is vitally important in consideration for hiring an individual.

Question: What Are Employer's Attitudes Toward Non-Traditional Programs in General and Metropolitan College's Program in Particular?

The responses to this question reflected more uncertainty than in the other areas (see items 3, 13, 26 and 27). Over 50% of the responses were "no opinion" or "uncertain." As stated earlier, the Metropolitan College is looked upon favorably and in combination with the lack of knowledge of non-traditional programs this seems to indicate that employers like what the College is doing without really knowing exactly what it is.

With some explanation of the concepts, two-thirds of the employers are in favor of students receiving credit for experience and through examination. Some were very enthusaistic about this concept.

Only one person felt that the quality of non-traditional programs was inferior to the more traditional programs. Forty-three percent felt that non-traditional programs were comparable to or better than traditional ones. No one indicated that non-traditional programs were too unstructured or too easy, although over half of the sample said they felt uneasy about judging and were therefore unable to make an informed comparisons.

Conclusions, Judgments, and Recommendations

The judgments team (project consultants) were enthused about the study of employers noting that such efforts were rarely carried out. In addition, they felt that the data were positive, (surprisingly so in the case of positive attitudes about non-traditional programs) and these results reflect well on the College.

A number of specific recommendations resulted from this study. They were:

1. The College should consider developing literature oriented to employers. This might help them interpret some aspects of non-traditional education in general and Metropolitan College in particular.
2. The College might offer a workshop on learning alternatives for adults and might establish an educational information service for personnel offices.
3. More attention might be devoted to providing information to professional and company publications.
4. Specialty courses aimed at knowledge or skills related to certain professional functions might benefit employees and attract the attention of employers.

These recommendations will be taken under advisement by the College's administration.

In reviewing the results of this survey, several things should be considered. While the Metropolitan College is generally well-known and well thought of, most personnel managers were unable ot identify individual employees who were/are students. The study did not seek out specific employees because of issues related to confidentiality. It would seem that efforts should be directed toward making the students and their records distinguishable as being part of Metropolitan College, while maintaining identification with St. Louis University.

Several managers requested current information about the College as well as being included on a mailing list. This would suggest reviewing and possibly revamping the College's promotional literature and mailing lists to include local employers.

While there is no evidence that students are having a visible impact in the work place, there are mitigating circumstances, as explained earlier in this report. There might be a serendipitous impact of the College. Several personnel managers remarked, one most fervently, that when an employee had enough stamina and determination to work for a degree at night, it was a good indicator of his or her approach to life and work. They regarded it most favorably and felt it would probably result in a career advancement for the employee/student, citing several examples. One person felt his biggest problem around employee education was convincing people that it was necessary and important for advancement. He never hesitated to promote people who worked at attaining college credits and degrees.

A final word on the survey methodology. If anything, it "felt good" in practice and it was gratifying to see immediate results. This, though, is not sufficient for widespread adaptation. It is recommended that a similar instrument be mailed to another sample of employers, drawn from the College's files. This instrument should be modified by including both open and closed reponse categories to the same questions. This could serve to validate some of the earlier conclusions about the utility and value of the method while providing additional information about the conclusions.

***************************** Economics and Finance ************************

The methodology involved contracting an external expert to study the College and analyze data. Initially, the contractor familiarized himself with the College by reviewing the College's long range plan, the current bulletin, annual reports, and budget summaries.

Some data were gathered by the College and mailed to him. These included, for example, five years' enrollment figures for the College and other evening schools in the University. Other data were gathered in person by reviewing records (e.g. University financial allocation study results) and through interviews (e.g., with other undergraduate academic deans).

Three topics related to the economics and finance of Metropolitan College of Saint Louis University were chosen for examination to test (and illustrate) this component of the quality assessment model. Each topic is presented in question form. A rationale is provided for its inclusion in the first-year evaluation work for Metropolitan College. Finally, preliminary evidence is brought to bear to answer each question.

The results of the financial study are presented in the following sections.

Enrollment, Revenue, and Cost Impact Within the Parent Institution.

The question is expressed as follows:

> What impact has the Metropolitan degree program had on the revenues of the institution? What secondary effects, if any, has the program had on income and costs elsewhere (e.g., through enrollment shifts)?

In general, this question is important if a new program is offered on-campus, or if it is off-campus but in the general vicinity of the parent institution. There may be an expansion in total enrollment and a shift from one program to another. Effects on both revenues and costs are distinct possibilities. First, if some students who would otherwise be enrolled in other programs end up in the new program (especially where tuition charges differ), revenue effects may be readily seen. Secondly, if campus administrators fail to plan for enrollment shifts, unit costs in other programs may rise. In the specific case of Metropolitan College's degree programs, there are several reasons to examine enrollment impact:

--Saint Louis University offers evening degree programs at the undergraduate level through its College of Arts and Sciences, School of Business and Administration, and Metropolitan College (alone and jointly with the School of Nursing and Allied Health Professions).

- While all undergraduate students in evening programs pay $50 per semester credit, full-time day students pay $115 per credit.

- Metropolitan College's Bachelor of Business Studies program is being phased out. The School of Business and Administration offers a bachelor's degree in business administration. The School of Nursing and Allied Health Professions operates both a day program and an evening R. N. transfer program; the latter is offered jointly with Metropolitan College.

- Slightly over half the courses offered by Metropolitan College are conducted on-campus; the rest take place at off-campus centers in the Metropolitan area.

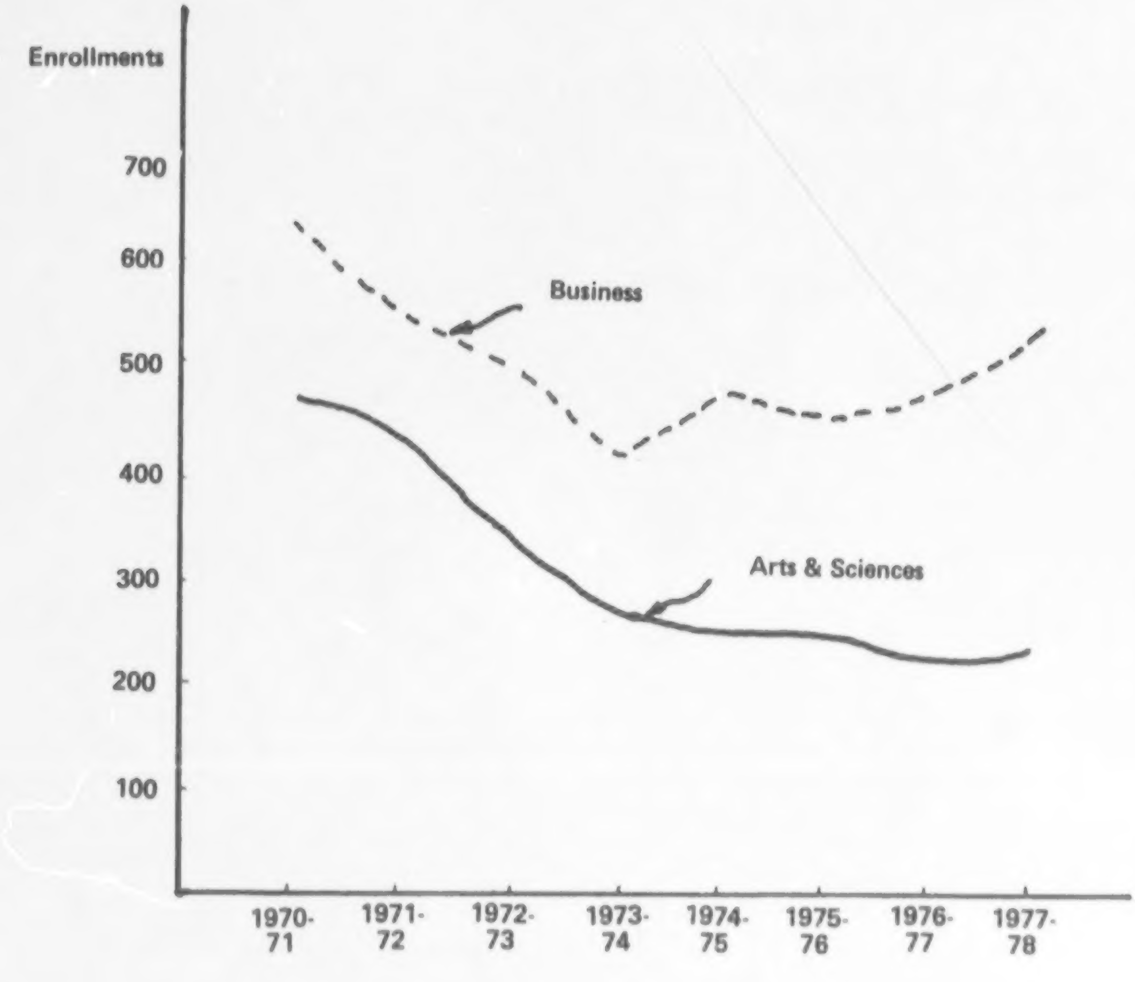
Of the 1,000 or so students enrolled in the Metropolitan College, it would appear that no more than 100, and probably considerably fewer, would be enrolled in other evening or day programs of Saint Louis University in the absence of the College's degree programs. Partly off-setting any negative effect is the likelihood that over time Metropolitan graduates have added somewhat to post-baccalaureate enrollments elsewhere in the University.

The evidence for these assertions, although not watertight, is nonetheless rather compelling. First of all, as indicated in Figure 11 enrollment declines in two "competing" evening programs were only slightly greater in relative terms between 1972-73 and 1973-74 (the first year for the College's degree programs) than in the immediately preceding years. Second, it is conceivable, although speculative, that the Metropolitan College's programs stimulated other academic units to arrest enrollment declines--and, in the case of the Business School, to rebuild enrollments. Third, the dean of the School of Business believes that students perceive his school's undergraduate program and the Metropolitan College business program as "different products." Both he and the dean of Arts and Sciences feel that the College's suburban centers have drawn students who would not come to the campus. The academic vice president and the dean of Metropolitan College point to the age restriction in Metropolitan College (22 or older) as a limit to enrollment "slippage." Only the dean of the nursing school sees a significant and continuing negative enrollment impact, and even at that, it seems to be of little (or no) concern. The evening R. N. transfer program has expanded rapidly since its initiation in 1973-74; some 400 diploma and associate-degree nurses are now enrolled in the program. The practically identical, daytime R. N. transfer program, meanwhile, has experienced a drop from between 145 and 150 students to 115 students now. Offsetting, in part, this decline, it is worth repeating that a few Metropolitan College graduates go on to graduate school--especially in psychology and urban studies, but also in nursing and business.

A thorough assessment of the revenue and cost implications of the "modest slippage" from one program to another was not possible.

FIGURE 11

EVENING SCHOOL ENROLLMENTS IN ARTS AND SCIENCE AND IN BUSINESS AND ADMINISTRATION, SAINT LOUIS UNIVERSITY, 1970 - 71 THROUGH 1977 - 78*



*A sum of 1st and 2nd semester enrollments for each academic year.

Source: Unpublished data provided by Dean Carl Harshman, June 15, 1978.

The revenue effect is complicated by some differences in student workload from one program to another and by the fact that the full-time day students pay about $95 per credit rather than $115. Sincere there was no percipitous drop in enrollments elsewhere in the University as a consequence of Metropolitan College, it is unlikely that any enrollment slippage had much effect on unit (credit hour) costs elsewhere in the University.

Unit Cost of Instruction in Metropolitan College and Comparison With Other Programs.

The question may be expressed as follows:

What is the unit cost of instruction in Metropolitan College degree programs?

Does this program bear a "fair share" of indirect and overhead costs of the University?

How do unit costs compare with those in other evening programs of Saint Louis University?

The most recent fiscal year for which complete financial information is available on programs of Metropolitan College is 1976-77. College and University accounting statements provide a starting point for the calculation of unit costs--that is, cost per credit hour, or the cost per full-time-equivalent student. Evident in a moment is the fact that the way in which indirect and overhead costs are allocated among campuses and academic units highlights the importance of allocation formulas.

Ignoring transfers from unrestricted funds--and also ignoring unrestricted gifts, endowment income, and development funds allocated to the campus and to academic units--it would appear, at first glance anyway, that total revenues of Metropolitan College exceeded total expenditures by about $10,000:

1. Revenues		
a. Students enrolled in Metropolitan College	$578,097	
b. Students enrolled in the Nursing Program (non-Nursing courses)	210,634	
c. Total allocated revenues		$788,731
2. Expenditures		
a. Metropolitan College	492,174	
b. Indirect and University Overhead	286,704	
c. Total allocated costs		788,878
3. Net Gain		$ 9,853

These figures, however, include Metropolitan College's non-credit Community Service division. As a first approximation, it would appear that the following subtractions from revenues and expenditures should be made:

1a. Community Service revenues: $39,000

2a. Community Service expenses: 45,000

Ignoring indirect costs and University overhead, it may be that $45,000 still understates the actual costs in the Metropolitan College accounts which should be allocated to the Community Service Program.

Indirect and University overhead costs require discussion for they illustrate a problem of proper cost accounting. The Main (Frost) campus of Saint Louis University contains five major academic units: 1) College of Arts and Sciences; 2) School of Business and Administration; 3) School of Social Services; 4) School of Law, and 5) Metropolitan College. These five units spent $12.6 million in 1976-77. An additional 4.8 million was spent on buildings and grounds, the main library, general computer center services, and for various University and campus-side services (e.g., Admissions, Registrar, Student Services, and University Administration).

One thing is clear, from a University-wide point of view, indirect and overhead costs must somehow be covered by revenues in the long-run for a private institution like Saint Louis University to stay in business. Thus, in the absence of a compelling reason to the contrary, programs are expected to bear their "fair share" of indirect and overhead costs and, if possible, to make some contribution toward those which are fixed. The question is what constitutes a program or unit's "fair share."

Accounts are kept and budgets prepared under the direction of the Vice-President for Business and Finance. Some eight years ago, at the insistence of the Board of Trustees, basic formulas were devised for allocation of indirect and overhead expenditures. The procedures may be summarized as follows: 1) all instructional and other expenses of the schools and colleges are considered direct expenditures; 2) other expenditures, where it appears appropriate to do so, are allocated on the basis of FTE enrollment, that is, if a college has 50 percent of the campus-wide FTE enrollment, 50 percent of the overhead cost is charged to that college; 3) for some overhead elements, an average of the unit's share of total expenditures and of total FTE enrollment is used.[1]

These simple allocation formulas serve a purpose. They assure, for example, that all education and general expenditures are distributed somewhere. Such formulas, however, are not especially revealing when it comes to ascertaining the actual indirect costs of providing instruction, or comparing programs which differ in their use of campus-wide or university-side resources or services.

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[1] An intervening step, ignored here, is to allocate some expenditures between the Frost and the South (Medical Center) campuses.

It is a useful exercise to examine some of the items which comprise the $286,704 of "allocated" expenditures shown above. Over one-fifth (21.6%) is Metropolitan College's share of the Main Library. (Separate libraries such as Law, are considered direct expenditures of the academic unit housing the library.) In all likelihood, since about half Metropolitan College students attend off-campus centers, the $61,795 overstates the actual amount of main library services used by Metropolitan College students. The same may be true of the $38,040 for student services, which includes the Admissions office, the Registrar, the Office of Student Financial Aid, the Counseling and Guidance Center, and the like. Metropolitan College coordinates its efforts with these and similar units, but (1) does much of its own recruiting of students (an Admissions Office function for regular day students); (2) handles registration by mail; (3) administers its own small financial aid program ($10,000 per year); and (4) provides considerable academic advising through its own Office of Student Services and through staff in centers (who act as advisors).

About 60% of Metropolitan Collge classes are conducted on-campus. The operation and maintenance costs of buildings used in whole, or in part, by an academic unit for instruction are categorized as direct costs. Beyond such costs, Metropolitan Collge was charged an allocated cost of $70,584 for operation and maintenance of common campus buildings. Most campuses, such as the Frost campus of Saint Louis University, were built to accomodate full-time day students, most of whom are expected to live, work, and play on-campus. Since most Metropolitan College students have adult responsibilities in the community and attend classes at off-campus centers, which are rented (a direct cost), the $70,584 charge doubtless overstates the "true facilities cost" of serving the College's students. (Annual rent for the 40% of courses off-campus is about $12,000.)

Metropolitan College's share of general University administrative expenses--which include the Board of Trustees, the President's office, and other offices of senior officials, plus that part of data processing not charged to a unit for identifiable services--amounted to $42,749. Beyond this amount, $51,524 of general institutional expenses were allocated to the College. This sum includes disability insurance, ticket discounts, the affirmative action program, general legal and public relations expenses, TIAA, social security contributions, and the like. On the whole, these latter allocations do not appear to be unreasonable, except perhaps for some fringe benefits and public relations (the College funds most of its own public relations activities). Here, again, more detailed study is required. Since, for example, forty to fifty percent of the Metropolitan College instructional workload is handled by community-based faculty, the allocation of total fringe benefits may be overstated.

In questioning some of the allocated costs, the direction of adjustments may appear to be all one-way, but that is not the case.

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In questioning some of the allocated costs, the direction of adjustments may appear to be all one-way, but that is not the case.

The following question should be raised: Are there costs reported in the budgets of other schools and colleges which might logically be related to the Metropolitan College program? One that comes to mind is departmental expenses (secretarial help, office supplies) used in the preparation of course syllabi, examination papers, hand-outs, and the like. It is true that Metropolitan College can (and does) provide this service to its faculty, but those who have offices on campus may find it more convenient to use their own departmental resources.

The above discussion of indirect and overhead costs highlights the importance of carefully considering such costs in making inter-program cost comparisons or decisions regarding expansion or contraction of programs. Clearly, whether all costs are reflected in the budget of an academic unit will often depend on the configuration of resources and activities, and whether the program is operated by a single-purpose institution or is one among many units of a multi-purpose institution. Without denying the legitimacy of generating a sizeable margin over direct costs, the use of the kind of allocation formulas found in the Saint Louis University case is not without its problems in decision-making. Calculated average costs (of overhead services) are no replacement for careful analysis of usage rates and of marginal (or incremental) costs, if one were contemplating a change in the size of a program.

Time did not permit a thorough analysis of the comparative costs of the various undergraduate evening programs of Saint Louis University. (Of course, comparative cost information reveals only one side of the coin. For economic decision-making, one would also want to look at comparative tuition fees.) But, some things can be said. Over the 1976-77 year (summer, plus three terms), expenditures by Metropolitan College for faculty salaries amounted to $174,938, or to 37.7 percent of the direct expenditures of $464,174 indicated earlier. Included are only those salaries for non-nursing courses offered through the College. By dividing tuition income for all students (including nursing students taking non-Nursing courses) of $755,700 by $50 per credit hour, we know that approximately 15,114 credit hours were generated by such courses. At the undergraduate level, 30 credit hours is equal to one full-time-equivalent student. Hence, including the nursing student share, 15,114 credits is equivalent to 504 FTE student years. The direct instructional expense (faculty salaries only) was $11.57 per credit hour; or, $347 per FTE. Since faculty salaries represent, however, only 37.7 percent of direct expenditures and only 23.3 percent of total (direct plus allocated) expenses, one must divide these unit costs by .377 and .233 to estimate total costs. The results are $30.69 and $49.66 per credit hour; and $920 and $1,489 per FTE student year. These figures, of course, assume that the allocated costs are proper--an assumption questioned above.

By comparison, faculty salaries paid by the School of Nursing and Allied Health Professions (N&AHP) for nursing courses offered through Metropolitan College totaled $57,254 in 1976-77. Because these salaries are paid by the School of Nursing and nursing course enrollment data are separate a meaningful comparison is not possible.

According to the dean of the School of Business, the direct salary cost per credit hour in the Business evening program is considerably higher than in Metropolitan College, including its evening R. N. transfer program operated jointly with the Nursing School. Some 18 to 20 sections are offered each semester in the evening business program, all on-campus. The average section size is between 20 and 25 students. The typical course is three credit hours. Faculty in the Business School have a nine hour teaching load. Evening courses are treated like all other courses--that is, they are part of a faculty member's regular teaching load. Some courses are taught by graduate assistants. The dean indicated that the average salary cost per section is about $3,500. Thus, a three credit hour class with 22 students would generate 66 credit hours. Dividing $3,500 by 66 implies a direct salary cost of $53 per semester credit--a figure slightly in excess of the $50 per credit charged to students enrolled in the evening business program. While such a cost per credit hour is relatively high, the revenues generated by evening business courses is also quite high, inasmuch as about half of the students taking such courses are regular day students (who pay $115 per credit). Others are enrolled in the evening Master's degree programs, remedying deficiencies or taking courses for which graduate credit is available. Such students pay $120 per credit.

The dean of Arts and Sciences provided information which, although less detailed, suggests that costs in the evening Arts and Sciences program are determined by about the same set of factors as in the evening business program.[2] Both programs use campus classrooms and related facilities. The College of Arts and Sciences has a graduate student who is available as an adviser in the evening. The Business School, which has the larger program, employs a coordinator of its evening undergraduate program. Sections taught in both the evening programs are considered as part of a faculty member's regular workload.

Enrollment, Revenue, and Cost Implications of Granting Credit for Prior Learning Outcomes

The question may be expressed as follows:

> What are the economic implications of Metropolitan College granting credit for prior non-collegiate learning?

Like other institutions of higher education, Metropolitan College has well-established procedures for evaluating transcripts and recognizing credits earned at other collegiate institutions. Credit may also be earned on the basis of test results. Beyond these ways of obtaining credit, students may take advantage of the College's prior experiential and non-collegiate learning program. This program can be justified on educational grounds; after all, many adults enter degree programs with a wealth of experience outside the collegiate sector -- some of which has resulted in learning relevant to the degree programs they wish to pursue.

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[2] Although no data were reviewed, it is said that a significant portion of the Arts and Sciences evening enrollment are employees receiving tuition remission. If tuition remission were charged to the program instead of to a general University account, it might well have a significant impact on comparative costs.

Metropolitan College's program -- and similar programs elsewhere -- might be expected to have two countervailing enrollment effects. On the one hand, the possibility of non-collegiate learning credit may encourage a student to enroll. On the other hand, the granting of such credit reduces the amount of course work necessary to complete a particular degree program. Besides any net enrollment impact, non-classroom, experiential learning programs are of interest in that the cost of evaluating non-collegiate learning can be quite expensive, depending on the procedures used.

Budgeted outlays for 1977-78, and conversations with the dean of the College, indicate the following:

-- A seminar is offered, at no cost, to students who are interested in pursuing sponsored non-collegiate or experiential learning credit. The seminar director is paid $275 per month for part-time work. She directs the overall program (counsels students, processes portfolios) in addition to conducting the seminar.

-- The procedures and criteria were developed with the help of a CAEL grant.

-- The charge for submission of a portfolio is $50. During the 1977-78 year, about 40 persons submitted portfolios.

-- Portfolios are typically read by one faculty member ("expert"). An honorarium of $20 is paid for each review by an expert.

-- If credit is recommended, the charge for recording the credit -- over and above the portfolio submission fee -- is as follows:

1-2 credits	$15
3-4 credits	25
5-6 credits	50
7-10 credits	100
11-19 credits	150
20-24 credits	200
25-30 credits	250

-- On the basis of experience in preceding years, fees for recording credit during 1977-78 were budgeted at $3,000. It was assumed that the average portfolio would be evaluated for 7.5 credits. (40 portfolios x 7.5 credits x $10 per credit on the average).

In sum, revenues for the program were budgeted at $5,000. Direct salary expenses were projected at $2,750 for the program director and a minimum of $800 in honoraria. If indirect expenses of Metropolitan College amounted to $1,450 for this program -- not an unreasonable assumption -- the program may have "broken even," ignoring indirect and overhead costs above Metropolitan College.[3]

It makes no sense to judge the non-collegiate credit program on economic grounds alone. The process can reduce the private costs to students, if the process is not too time-consuming and if a person has, indeed, learned a good deal outside college and can readily document such learning. Clearly, as indicated earlier, the margin of revenue over direct costs is higher in the course offerings than for this program. Although if revenues exceed budget (as was the case in the most recent year), the expenditures will not increase correspondingly thus creating an increase in net. Also, it would be noted that relatively few students take advantage of the program. Hence, it probably has not drawn sizeable numbers of students to the College. Nevertheless, one other academic dean holds the opinion that this program has increased Metropolitan College's enrollment somewhat by minimizing the barriers to college attendance.

Conclusions, Judgments, and Recommendations

In terms of enrollment, Metropolitan College's numbers are significant. In addition, it appears that the cooperative program with the School of Nursing has spurred enrollments in the R.N. Transfer Program. Since there is no evidence that the College caused a significant decrease in the enrollments of other University undergraduate evening programs, the effect of the College on the University's enrollment picture is clearly positive. This positive enrollment picture translates into a positive revenues picture.

The overall financial picture is positive. For direct dollars, the College's revenues exceed expenditures. If the direct costs and revenues of the R.N. Transfer Program are considered the margin increases.

The consideration of indirect costs is another matter. It is argued, and the report concurs, that the College bears a disproportionate share of indirect costs. The question of "fair share" is clearly unanswered. The uses of allocation studies information should be clarified as means to suggest directions in the allocation studies of the future.

The positive revenues: expenditures situation seems to be a result of getting more than expected from part-time faculty and staff.

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[3] In fact, the revenues for this program have exceeded budget in each of the last three years. In this case it appears that the program generates a surplus.

Without the costs (faculty salary)/productivity (student credit hours) ratio that exists the net dollars would not be possible. The result is that any reduction in expenditures (at current enrollment levels) is not possible and must be avoided. The low salaries and an efficient delivery system are essential to maintain the current financial status.

One option to the current situation is to increase the future. The current rate of $50/credit hour is among the lowest charged in St. Louis area private institutions. Depending on predictions of elasticity, an increase may be warranted.

If tuition is increased it may result in questions about the relationship between faculty salary and quality of instruction. As noted above, the salaries (part-time) are low. If this adversely affects the quality of instruction or if more money would create additional positions, the question should be opened.

Turning to the future, the following lines of inquiry are recommended in further implementation (and testing) of the economic components of the evaluation model (the list does not necessarily imply any judgment about order of importance):

1. More detailed examination of the comparative revenues and costs of Saint Louis University evening programs, with special attention to short-and long-run revenue effects.

2. Examination of actual usage rates, workloads, and beneficiaries of indirect and overhead services of the University, with a view toward development of improved cost analysis and allocation formulas for decision-making.

3. Examination of likely gains and losses of reallocation of responsibilities for performance of selected functions, such as recruitment, course registration, student records, advising, and institutional research, which are performed by Metropolitan College and by other offices within the University (except for the latter function).

4. Consideration of the educational and economic ramifications of organizing all undergraduate evening programs under a single evening division, perhaps with academic program responsibilities handled differently than at the present time.

5. Examination of indirect effects on enrollment, if any, of having Metropolitan College responsible for adult degree programs. It is possible that Metropolitan College has stimulated the College of Arts and Sciences and the School of Business to maintain enrollments in their evening programs. It is also possible that these and other academic units have been less aggressive than they might be, because of Metropolitan College's existence.

6. Application of the logic of investment decision-making to the acquisition and use of grant funds by Metropolitan College (e.g., the CAEL grant) with possible attention to the accounting for obsolescence of intangible assets over time and a program-renewal fund.

7. Development of a managerial accounting scheme designed to improve decision-making in response to contingencies. Revised procedures might involve:

   a) reconsideration of expenditure review and approval criteria;

   b) categorization of expenditure elements in terms of revenue implications; and

   c) similar matters.

********** Outcomes Study: A Survey of Metropolitan College Graduates **********

The last of the four pilot studies was aimed at assessing some outcomes for students. Given that outcomes were measured historically in terms of such criteria as graduates entering graduate/professional schools, type of first job, etc., it was considered important to look at some of the effects of the experience on the College's students. Throughout the first year of this project, a study carried out by the Bureau of Social Science Research (Washington, D.C.) was monitored. The focus of the BSSR effort was the assessment of certain outcomes with special emphasis on the "negotiability" and "acceptability" of external degrees.[4] The BSSR project and an instrument developed in a study at Minnesota Metropolitan State College helped tremendously in the structure of this effort. The study was carried out in the spring of 1978 and the results are reported below.

Quality Questions

The following questions were the basis for the survey of Metropolitan College graduates:

1. How important were various goals for the graduates and to what extent were the goals attained as a result of the education?

2. In what ways did the students benefit from the degree?

3. To what extent do the graduates perceive personal gains from the degree?

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[4] Metropolitan College served as a test site for one of the BSSR instruments, but was not a part of the study because it did not qualify under one criterion for an external degree program. Regardless, many of the questions raised in that and related studies are the same as those asked in Metropolitan College.

4. How do graduates compare an education at Metropolitan College to that of other non-traditional programs? To established programs?

5. To what extent did the experience affect career/employment?

6. What was the expected effect of the degree on the graduates' job? What actually happened?

7. What were outcomes in terms of new employment and/or post-baccalaureate education?

8. How do the graduates rate their overall satisfaction with Metropolitan College?

Methodology

The target group for the study was all of the graduates of Metropolitan College for the period 1974-1976. In the first year (74-75) there were 44 graduates: in the second year (75-76) there were 144 graduates. The population, therefore, consisted of 188 graduates.

The instrument utilized in this survey was developed by the College. The BSSR study, the Minnesota Metropolitan State College instrument, and an instrument developed locally to survey the graduates of the College of Arts and Sciences were the main sources of items.[6,7] Items in the instruments were modified as necessary and items were created where none existed (see Appendix E).

There was a preliminary telephone call to alumni asking if they would participate and telling them an instrument had been mailed. The instrument was mailed to the graduates in May of 1978. A follow-up telephone call was made ten days after the instrument was sent out in order to improve the return rate.

An evaluation consultant helped develop the instrument and managed the survey and analysis processes.

Results

Of the 188 instruments sent out, five were returned as undeliverable and 86 were completed and returned (47%). Seventy-two percent (72%) of the respondents were men and 25.6% were women. White alumni constituted 73.2% of those responding and 20.9% were black.

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[6] Carol P. Sosdian and Laure M. Sharp, The External Degree as Credential: Notes on Methodology, National Institute of Education, Contract #NIE-R-76-0098. (Washington, D.C.: Bureau of Social Science Research, 1978).

[7] Career Planning and Placement Center, "Arts College Alumni Survey," Universitas. Vol. 3, No. 3, (St. Louis: St. Louis University, Winter, 1978).

The majority of respondents had earned a business degree (57%); 24.4% reported receiving the urban affairs degree; 17.4% the liberal studies degree. Since the nursing degree is awarded through the School of Nursing and Allied Health Professions, these alumni are not considered to be the College's and, therefore, were not surveyed.

Conclusions, Judgments, and Recommendations

The results in the tables (Appendix F) are reported as percentages of the total number of respondents (n=86). For such table the percentages are included for each response. Below the table are two columns of information. The left-hand column contains the researcher's conclusions from the data. The right-hand column contains the researcher's interpretation of the conclusions in the form of inferences and implications.

Based on these data there are a number of conclusions which are agreed upon by the researcher and consultants:

1. Career related goals and the satisfaction of having a degree were/are most important goals for a number of the graduates; enjoyment of learning is not a high priority goal.

2. The benefits of a degree tend to parallel the priorities noted above. In addition, however, about one-fourth of the alumni indicate that the degree as a "stepping-stone" to further education is the most important benefit.

3. Most of the goals are instrumental rather than intellectual. The personal gains data support what might have been inferred from previous data.

4. When rated against other non-traditional programs, the alumni perceived Metropolitan College to be somewhat better. They are, however, less positive when comparing the College to more established programs.

5. The degree appears to correlate with movement into middle management positions and with a major increase of entry into professional positions and top-level management.

6. Expected and actual changes related to the job were consistent. Increased pay, responsibility, and respect from co-workers were indicated as expected by over 60% of respondents. In each case the "happened" percentage was high.

7. In general, it appears that graduates do not seek (or do not find) work with new employers, but rather that advancement and other rewards occur with the current employer.

8. Of the graduates who applied for admission to graduate or professional school (47%), 83% were admitted. Of those admitted who enrolled, about 15% saw their undergraduate experience as limiting them in their graduate work.

9. Over 90% of the graduates were satisfied with the degree and with the quality of the educational program.

The major implication has to do with career (instrumental) orientation of the graduates. This aim for education contrasts with the traditional/historical notion of a liberal education. One result is that the data present a rationale for major differences in the College's programs from those of traditional programs.

The judgments team was surprised at the degree of occupational improvement that occurred after the degree was earned. The graduates are clearly proud of their accomplishment and rate the quality of their experience as high. Overall, it is felt that the College can take pride in the results of the survey (assuming the 47% are representative of the total population of graduates).

Some questions were raised and recommendations made for future study of the outcomes of the program for graduates. A major concern for the validity of the data is the representativeness of the respondents. It might be helpful to compare the demography of the respondents to that of the graduates as a whole in order to do an initial comparison. It would be helpful to know why about 15% saw their experience in Metropolitan College as limiting in graduate/professional school. A follow-up with these persons might reveal some new data.

Other (additional) sources of data might be sought in regard to outcomes. Graduate school records, employer's assessment, etc., are possible sources of data. An exit interview at the time of graduation might provide some insights to the experience and some data not available through paper-and-pencil techniques. In addition, if there are concerns which are forgotten over time, they could be documented with the interview.

There are no special recommendations for methodology except that a value should be placed on a higher response rate. With more time to complete such a study and additional follow-up techniques, a higher rate might be possible.

Summary

The four pilot studies carried out as a part of this project yielded a wealth of important information. Much of it highlights the positive aspects of the Metropolitan College. As such, it serves to reinforce many of the goals and programs which currently exist. At the same time, there are a number of areas in which further investigation or administrative action are possible. Improvements in the academic advising program are an example of such an area. The concerns expressed by some graduates about their preparation for graduate/professional education are another.

Overall, the project consultants (judgment team) were very positive about the studies and the results. With the exception of the limitation noted, the pilot studies represent the kind of quality assessment research that can be done on a non-traditional program.

There is one example of the importance of connecting elements of the evaluation of the program. In the employer survey there was little or no evidence that the College was having a positive impact on the work of graduates. The outcomes survey, however, indicated tremendous changes. At some point someone will have to chose (a) which is accurate and (b) what to do as a result. In any case the importance of multiple sources of data is highlighted as well as the relationship between and among various quality assessments.

CHAPTER 9

WHAT'S NEXT?: THE FUTURE OF THE STUDY OF QUALITY

As this portion of the project draws to a close, some plans are formulated for the next steps in the process of identifying and assessing quality. The remaining portion of the report is devoted to a discussion of four areas: Using the information (from the pilot studies), structuring a test of the model, disseminating results, and adopting the model in other non-traditional programs.

Using the Pilot Studies.

The pilot studies reported in the previous chapter provide a wealth of information about Metropolitan College and the quality of its programs. The intent is to structure a planning process, to be implemented during 1978-79, which incorporates the findings, judgments, and recommendations. The process will require a thorough review of the studies by the College's and the University's administrations. Subsequently, it will be necessary to identify what aspects of the College are to be kept in place and which are to be modified or phased out.

This activity is in some respects a real test of the evaluation model. If the studies and recommendations do not have a significant effect on the structure and operation of the College, the effort is wasted. A part of the non-traditional program's accountability in the model is to demonstrate the use of results in planning and decision-making.

As a part of this process, the College will have to take a look at the larger issue of a planning, programming, and evaluation cycle. One has never been employed and this project provides the groundwork for establishing one. This could be an important spin-off of the quality assessment effort. Without a planned, systematic cycle of events which incorporates the quality analysis with planning and budgeting much of the potential effect is lost.[1]

Structuring a Test of the Model

As noted earlier, time and resource constraints prohibited a thorough test of the model in this project. Since it was not possible in this project, a commitment was made to structure the test after the model was fully developed.

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[1] In fact, some findings from the studies have already been used. Modifications in the College's publications program, the advising system, and writing courses have been made on the basis of the results.

During the 1978-79 academic year Metropolitan College will apply the model to its programs. The steps outlined in Chapter will guide the test.

The success of the test should be reflected in a number of ways:

1. There should be some indication of the utility of the taxonomies in the design of the evaluation.
2. The steering committee should be visible and active, a first year plan should be published, and a number of the initial studies carried out.
3. There should be a long range plan (three to five years) for ongoing assessment of quality.

If these exist it will serve as one kind of evidence; the content of each will be another.

At this point the College plans to publish an annual supplement to this report. The supplement will report evaluation activities as well as serve as a means to track the application and evaluation of the model.

Disseminating Results

The project consultants discussed a number of ways to disseminate results. To begin, printed reports will be made available to the higher education community. Second, presentations are planned for a number of regional and national professional meetings over the next eighteen to twenty-four months. Both techniques should generate some interest in the topic as well as some feedback about the model.

It is possible that some regional workshops will be organized. These would focus on explaining the model and discussing application problems and opportunities with respect to specific program. Finally, it is hoped that some local projects can be developed, the primary purpose of which would be to test the model in different settings to iron out difficulties.

The initial aim of all dissemination efforts would be to obtain feedback about the conceptual validity of the model. Beyond that, some applications to specific programs need to be developed in order to test qualities such as utility, generalizability, validity, etc. Only time and programs can provide such information. Early in the report it was noted that the model was not intended to be (nor could it be) cast in stone. At this point it merely serves as a jumping off point for what we hope is extensive application and testing resulting in improved quality of non-traditional programs.

Adopting the Model

By this point in the report the major remaining issue is related to adopting the model in other non-traditional programs. In considering testing the model on a non-traditional (or even a traditional) program, several factors must be considered. These are listed and discussed below.

A commitment to exploring the quality of a program is essential. It seems as though many would rather wait until someone asks about quality. Taking a hard look at our own is threatening. Deciding to look at the quality of a program requires a desire to know what is occurring and why as well as a commitment to accept and act upon negative findings. Any effort, no matter how good, is doomed to failure without commitment. It is not possible to predict the effects of a commitment at the program level without one at the institutional level. Clearly this is preferable to a lack of commitment at either level, but only actual cases will reveal the implications of mixed commitments.

Acquiring the necessary knowledge and skills is the first step. If a program wants to move beyond the existing definitions of quality a certain level of knowledge and skills must exist. Arriving at a working definition of quality is the beginning. This may be accomplished through program goals and objectives or other similar means. Becoming aware of alternative sources of data, understanding instrumentation and research methodologies, and knowing how to use results to reinforce or alter programs are important skills. If they do not exist within the program or the institution they will have to be developed or imported for the purposes of implementing the model.

The program must be prepared to commit additional resources to quality assessment. The implementation of the quality assessment model will require resources beyond those currently expended. The first kind of commitment involves time to structure and implement the model. In addition, many programs will quickly discover that their goals, long range plans, and existing evaluative techniques are inadequate for the task. In turn, additional time will be required to begin to upgrade these facets of the program. The second resource required for implementation is money. At present, few programs invest much if anything in program evaluations because evaluation is generally a low priority. Without question, though, it will be impossible to implement the model without additional (or reallocating) monies. There are creative ways to minimize costs (e.g., use of graduate students, developing in-house instrumentation), but there is no way to avoid them. Finally, people (as resource) will be required. There needs to be a coordinator for the effort; data collection (some of which will be done in-house) will absorb manpower; and so forth.

Plans must be made to integrate the model with other program activities. There is a close relationship between and among planning, program development, budgeting, and the assessment of quality. Part of the initial effort must be devoted to planning for the integration of the quality assessment outcomes with other administrative functions.

The model will require an evaluation. The model itself is by no means complete. It should not be adopted without also planning for an evaluation of the effort. The evaluation need not be complex or extensive, but only needs to provide some feedback about the model as a tool for quality control and decision-making.

Conclusion

As the text of this chapter indicates there is much to be done. This effort will continue on its own within Metropolitan College while other programs consider its utility. As dissemination and testing proceeds, it is hoped that some tangible results appear in the quality of non-traditional programs.

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APPENDIX A

METROPOLITAN COLLEGE

METROPOLITAN COLLEGE'S PHILOSOPHY AND PROGRAMS

The philosophy of the College is embodied in the overall purposes of Saint Louis University and the assumptions by which it operates. These purposes combined with the goals of Metropolitan College lead us to believe that:

1. The College must provide the best possible education; and education without quality is like no education at all.

   As an undergraduate school of Saint Louis University, the College reflects the tradition of quality education and maintains a unique, continuous and comprehensive evaluation system which helps the College monitor quality.

2. Our faculty and staff must relate to each student as an individual and that the education we provide must relate to the individual's unique needs and goals.

   We orient our faculty to adult learners; we maintain a highly qualified, well-trained academic advising/student services staff in order to better serve our students.

3. The operation of the College and the education it provides should be grounded in human values for an urban society.

   Our programs and staff reflect a commitment to human values; our curriculum provides opportunities to explore values and to study the values of our society.

4. Education cannot be separated from life; education occurs in the context of living and must intersect the life of the individual student.

   We help people clarify their goals for education, understand the relationship between learning and living, and choose courses which will best fit the particular needs and goals of the individual.

5. Learning is a lifelong process which begins before schooling, occurs outside it, and continues after it. Knowledge and ability are more important than the fashion in which they are acquired.

   The College's Program for the Evaluation of Non-Collegiate Learning acknowledges the fact that college-level learning can occur in a variety of settings and in a number of ways.

6. The focus of education should be on the learner, and the structure of education should assist not impede the learner's progress.

   The College attempts to validate all college level learning (experiential and traditional) in a fashion easily interpreted by employers and graduate and professional schools.

7. Education occurs in different ways at different points in one's life; the structure of education must fit the maturity of the student.

   Mature, experienced students require a different kind of instruction, assume more responsibility for learning on their own, and serve as a resource to the classroom experience. The College acknowledges these characteristics in the conduct of its programs.

8. Education must be flexible enough to accommodate the unique needs of the individual and sufficiently comprehensive to provide a legitimate credential for the learner.

   The College permits a great deal of flexibility in the general education/general electives catagories to provide students ample opportunity for self direction while maintaining specific requirements in the major fields to insure and validate professional competencies.

9. The faculty of the College should consist of a meaningful mix of University professors and practicing professionals.

   The College retains highly qualified, full-time Saint Louis University professors and successful, professional practicioners in equal numbers in order to present a balanced view of the relationship between education and living.

10. Education must be sensitive to the changing needs of the community and respond accordingly.

    New programs are added and established ones adapted to meet changing needs. The College maintains constant contact with area business and industry, government and social agencies, and professional associations in order to stay in touch with developing trends.

12. Access to education should not be limited by constraints of time, geography, or money.

    The College's programs are offered at various times (evening, weekend, daytime) and in various places (Saint Louis University, and North, South and West County) to permit enrollment under a variety of scheduling options. The College provides different financial options and a student grant fund to assist those who have limited financial resources.

13. Participation in education to the greatest extent of his/her abilities is the right of every individual.

    The College admits all high school graduates. We maintain that every person has the right to acquire an education and the College will not preclude this right through a selection process. Students who attend the College and find the need for additional skills or who feel it is not meeting their needs, have access to professional staff assistance in order to develop alternative learning strategies.

METROPOLITAN COLLEGE
SAINT LOUIS UNIVERSITY

ACADEMIC POLICIES

The 1978-79 Metropolitan College Bulletin contains academic requirements, policies and procedures which supercede previous statements of academic policy. In accordance with Saint Louis University policy, the College Bulletin serves as the agreement between the University and the student regarding matters of academic policy and procedure. Students enrolling in the College under the conditions of a previous Bulletin and the programs described in it have the option of completing their educational program as outlined in that Bulletin, or they may choose to pursue programs defined in subsequent Bulletins upon formal notification to the Dean of such intention. This decision is irreversible. Students enrolling in programs described in the current Bulletin do not have the option of adopting policies or pursuing programs described in previous Bulletins.

ADMISSION TO THE UNIVERSITY

All persons seeking admission to a degree-program at Metropolitan College must file an official application with the Dean of Admissions, Saint Louis University, 221 North Grand Boulevard, St. Louis, Missouri 63103. Completed applications must be accompanied by a non-refundable application fee of $15.00.

First Time College Students

To be admitted to college for the first time, the applicant must be at least 22 years of age or older, a high school diploma or record of having passed General Education Development (G.E.D.) High School Equivalency examinations. When a student meets both qualifications admission is assured.

For those who have not completed high school, evidence of educationally-related career or life experiences may be accepted in lieu of the diploma. An applicant in this category should contact the Dean of Metropolitan College for further information.

Transfer Students

Official transcripts from all previous colleges or universities attended must be on file before a student is considered for admission to a degree program. It is the student's responsibility to indicate such attendance on the application form and to request that official transcripts be sent directly to the Office of Admissions, Saint Louis University, from the institution which awarded the credit. (For information about acceptance of transfer credit see *Advanced Standing.*)

A student wishing to transfer to Metropolitan College from another school or division within Saint Louis University must apply for admission to the College by submitting the intra-University transfer form which may be obtained from the Registrar's Office. Students who have not attended Saint Louis University in the last calendar year, should reapply for admission using the College's application form. Former University students are not required to pay the $15.00 application fee.

Nursing Program

To apply for the Registered Nurse Transfer Division Program, students must be either Registered Nurses, graduates of hospital schools of nursing or graduates of community college programs in nursing. Admission applications must be accompanied by State Board Examination grades, official school of nursing and other college transcripts and the application fee. Registered Nurses enrolling in this program are to call the School of Nursing for the correct application form.

For further information regarding the Bachelor of Science in Nursing — Evening Division contact:

Miss Helen Wohlert
Saint Louis University School of Nursing
St. Louis, Missouri 63104
Phone (314) 664-9800

Certificate Program

An individual desiring to pursue a certificate program need **not** apply for admission to the University as a degree candidate. The student should check "Certificate Candidate" as entrance basis on the Metropolitan College Application Form. The application fee is $15.00. If credits earned are to be applied to a degree program, then the individual must be admitted to the University as a degree candidate. An additional application fee is NOT charged.

Unclassified Students

An unclassified student is any student not enrolled in a degree program at Metropolitan College or other college of Saint Louis University **or** is a person who possesses a degree and wishes to take a course or courses in Metropolitan College for reasons **other than to pursue a second undergraduate degree.** Students wishing to enroll with unclassified status must submit an application for admission and pay the $15 application fee. Transcripts of previous college work are **NOT** required.

Persons who earn credit as unclassified students and wish to apply them toward an undergrduate degree may change from unclassified to classified status at Metropolitan College at any time by declaring an Area of Emphasis and submitting transcripts of any previous college work. (Note: Credits earned at Metropolitan College are at the undergraduate level and are **not** applicable to a graduate or professional degree.)

Transient Students

A student enrolled at another college or university who wishes to earn credit at Metropolitan College for transfer to the home institution may enroll as a transient student. Applicants should complete the application for admission. The application with the $15.00 application fee should be sent to the Dean of Admissions, Saint Louis University, 221 N. Grand Blvd., St. Louis, Mo. 63103.

Not-for-credit Registration

Persons who wish to take a college course or courses designated for the not-for-credit option (these courses are identified in the class schedule each term) need not apply for admission to the University. Registration for the course or courses is to be completed through the Community Services Division during the registration period prior to the term the course is offered.

CLASSIFICATION

Students are classified on the basis of completed credits which have been accepted toward a degree by Metropolitan College.

Freshmen	**1 to 29 credits**
Sophomores	**30 to 59 credits**
Juniors	**60 to 89 credits**
Seniors	**90+ credits**

This procedure does not apply to unclassified students.

ADVANCED STANDING

University credit is awarded for learning which took place prior to enrollment at Metropolitan College. No more than 90 hours of advanced standing credit from other than the Saint Louis University may be applied toward a Saint Louis University degree.

Transfer Credit

Policies

College credit will be accepted and recorded only on the basis of official transcripts of previous college work. These transcripts must be mailed directly to the Dean of Admissions, Saint Louis University, 221 North Grand Boulevard, St. Louis, Missouri 63103, by the institution which awarded the credit.

Transfer credit will be accepted only from accredited institutions. Since official evaluation may require up to six weeks after receipt of official transcripts, applicants may obtain an unofficial evaluation of previous work, based on student copies of transcripts or grade reports, by scheduling an appointment with the College office.

Transfer credit is subject to the following conditions:

1. Credit from other institutions is accepted only for work completed with a grade of "C" or better, or Pass (pass-fail option).
2. Credit earned in other colleges of Saint Louis University will be accepted toward degrees at Metropolitan College, providing it was completed with a passing grade of D or better. This credit may be applied to the 30-hour residency requirement at Metropolitan College under certain circumstances.
3. Credit is accepted from community college Associate of Arts programs up to the amount required for that degree at the institution offering the degree. No more than 64 credits can be applied toward the bachelor's degree.
4. Up to 64 credits of the Associate in Applied Science degree in Law Enforcement from an accredited institution may be applied to the Bachelor of Urban Affairs and Community Service degree with an Area of Emphasis in Criminal Justice. Many other community college Associate in Applied Science degrees are acceptable under the *Ladder Curriculum Program* (see below).
5. Community College coursework, amounting to less than which is clearly identified as technically related or which is assigned a course number below 100 by the St. Louis Community College District is acceptable, only through the *Ladder Curriculum Program* option.
6. No more than six credits in freshman composition and six credits in college algebra may be applied toward any degree.
7. Except under the *Ladder Curriculum Program* a maximum of 12 credits in automated data processing will be accepted as follows: one course in automated data processing, one course in systems analysis and two courses in programming languages.
8. Credit is not accepted for any courses in the following areas: physical education, military science, secretarial areas (including office management and practices), automotive or aircraft mechanics, chapel, safety, keypunch, library resources, remedial courses, or any course judged similar to the above.
9. Up to twelve hours of advanced standing credit may be applied to a certificate program.

Ladder Curriculum Program

The Ladder Curriculum Program is for persons who have been awarded any of the community college Associate in Applied Science degrees accepted by Metropolitan College. Metropolitan College does not accept all current science degrees. The student should contact student records for evaluation. The program is designed to ensure the student, whose previous college work is in highly specialized or technical subject areas, that he or she will receive a broadly balanced education consistent with the goals and implications of a baccalareate degree.

To be awarded a degree, students must satisfy all regular degree requirements and the following specific requirements:

1. Only completed Associate of Applied Science degrees will be accepted in transfer. Partially completed degrees will be evaluated on course-by-course basis and credit will be accepted according to the policy for *Transfer Credit.*
2. 60 University credits will be awarded for the completed Associate of Applied Science degree.
3. The student must satisfactorily complete at least 45 credits of work at Metropolitan College and must satisfy all regular requirements for the bachelor's degree.
4. 24 credits in courses which satisfy requirements for the specific Area of Emphasis must be completed at Metropolitan College.
5. At least 30 credits in the following Liberal Studies areas must be satisfactorily completed:
   Humanities (12 credits) — At least four 3-credit courses in the following fields: Art or Art History, History, Literature, Music, Philosophy, Theology or Theatre.
   Social Sciences (12 credits) — At least four 3-credit courses in the following fields: Anthropology, Geography, Political Science, Psychology, Sociology or Urban Affairs.
   Electives (6 credits) — Any two 3-credit courses in any of the above areas or in the Natural Sciences, Mathematics or Foreign Languages.

The 30-hour liberal Studies requirements will normally be used to satisfy Directed Electives requirements for the degree. Students enrolled in the Liberal Studies or Urban Affairs and Community Service degree programs may not use the same courses to satisfy both the Liberal Studies and the Area of Emphasis requirements.

Credit by Examination

There are two programs through which students may earn credit by examinations. The College Level Examination Program (CLEP) General Examinations are for persons just starting college. CLEP Subject and other examination programs are for persons seeking credit beyond the freshman year.

CLEP General Examinations

Students may earn college credit equivalent to first year courses by taking the *College Level Examination Program (CLEP) General Examinations.* To be eligible for the CLEP General Examinations, a student may have accumulated no more than 24 credits, and must take the examinations within the first three terms in which he or she is enrolled at Metropolitan College.

Subject Examinations

Three standardized testing programs — CLEP Subject Examinations; Advanced Placement (AP) and Standard Achievement Tests — may be used at any time to demonstrate proficiency in specific and advanced areas of academic competency. Locally developed tests may also be used by permission of the Dean.

Policies

In order to apply credit by examination toward degree requirements, three general rules apply:

1. No more than 30 hours of credit by examination earned at another institution may be transferred to Metropolitan College. All such credit must meet or exceed the regular standards set for credit by examination by Metropolitan College.
2. No credit by examination may be awarded for areas in which there is also credit for coursework. A student with coursework related to one or more subject areas of CLEP General Examinations is not eligible for credit in that subject area, but the remaining examinations may be taken for credit in other areas.
3. All credit by examination must conform to the distribution requirements of the Associates' or Bachelor's degree program in which the student is enrolled.

Any student interested in earning credit by examination should contact the College office prior to taking an examination to be certain that credit can be awarded.

Credit Recommendations of the American Council on Education

A student may receive credit for educational experiences which have been evaluated under the auspices of the American Council on Education (ACE). Credits received are subject to same policy as that of any other transfer credit. Listings of educational experiences and the amount of college-level credit recommended are contained in two ACE publications:

1. "A Guide to the Evaluation of Educational Experiences in the Armed Services"—This guide lists service training courses, MOS ratings and USAFI/Dantes educational programs. To receive credit the student must submit to Metropolitan College official service records documenting educational experience.
2. "A Guide to Educational Programs in Non-Collegiate Organizations"—This guide lists educational and training programs sponsored by government, voluntary, labor and business organizations which have been evaluated under the auspices of ACE and recommended as equivalent to college-level work. Only credit recommendations specifically listed in these two publications can be used.

All credit recommended by the ACE must conform to the distribution requirements of the degree program in which the student is enrolled in order for that credit to be applied. Fees are charged for recording ACE credit recommendations.

An evaluation of armed services or other non-collegiate instruction is available from the College office on request.

Only credit recommendations specifically listed in these two publications can be recorded through this program.

All credit recommended by the ACE must conform to the distribution requirements of the degree program in which the student is enrolled in order for that credit to be applied. Fees are charged for recording ACE credit recommendations.

An application for evaluation of armed services or other non-collegiate instruction is available from the College office or at an off-campus center on requrest.

Non-Collegiate and Experiential Learning

Advanced levels of knowledge which have been acquired through career, community or other non-collegiate learning experiences can potentially represent college credit. Although formal institutionally-based education may stop upon completion of high school, learning does not. Metropolitan College recognizes this fact in the Program for Evaluation of Non-Collegiate Learning. Students who enroll in this program learn how to identify and to document their skills. Faculty members then evaluate the documentation in order to award academic credit to those who have demonstrated their proficiency. Application for participation in this program is offered at the beginning of each academic term.

All credit recommended must conform to the distribution requirements of the degree program in which the student is enrolled. For information about the fees and other requirements, contact the Director of the Program for Evaluation of Non-Collegiate Learning in the College office.

ACADEMIC ADVISING

Academic advising is a service Metropolitan College offers its students. An advisor is on duty each evening (6-9:30 p.m.) on campus at the off-campus centers to assist students and prospective students with questions regarding their academic programs. Students are encouraged to make an appointment with an advisor at least once each academic year to review progress to date and remaining program requirements.

Students who wish to review their records are asked to make appointments at least one week in advance.

Students who register without consulting an advisor assume responsibility for the courses selected.

REGISTRATION

Registration for Metropolitan College courses, including payment of tuition, is done through the College office. Specific registration information including the next term's class schedule is published by the College approximately six weeks before each term begins. Students who are currently registered or who attended within the last two terms receive registration materials by mail automatically. Former students and interested persons may telephone or write the College office for information regarding registration and scheduled classes.

Registration may be accomplished by mail or in person through the first week of classes each term. All students are encouraged to consult an academic advisor before registering in order to avoid any problems regarding duplication of coursework or course prerequisites. This is especially important for students in their first two terms at Metropolitan College.

In accordance with University regulations, no registration is completed or class seats reserved until both the registration form and full tuition payment have been received in the Metropolitan College office.

Registration and tuition payment for Metropolitan College courses will NOT be accepted by the Office of the Registrar or the Controller's Office at Saint Louis University. All registrations and tuition must be processed through Metropolitan College.

Metropolitan College reserves the right to refuse or revoke the registration of any persons whose academic performance is inconsistent with the goals of the College or the University or of any person who fails to comply with the policies and procedures of the College and University.

Late Registration

After the close of regular registration students can complete late registration prior to the second class session. A $5.00 late registration fee is assessed at the time of registration.

Independent Study

Independent Study provides the opportunity for a student to create a learning experience not specifically represented in the Metropolitan College curriculum, or to replicate a course not available in the current schedule. Students who wish to pursue independent study should talk with an academic advisor or the dean prior to submitting a program for approval.

The procedure to be followed for proposing a course of independent study is as follows:

The student selects an instructor from the faculty of Metropolitan College or a qualified person outside the College faculty. The student and instructor mutually agree upon the course of study prior to submitting it to the College office. The dean of the College gives approval to all independent study prior to registration.

After approval is given, a copy of the course outline will be sent to both student and instructor: the original will be retained in the student's file. Upon completion of the assignment the faculty member forwards all projects to the Office of the Dean along with the grade. Students who wish to keep a copy of their work should arrange for necessary reproduction.

Change of Registration

Adding and dropping courses is accomplished by filling out a *"Change of Registration"* form in the College office or at an off-campus center. A fee of one dollar is charged for each change. Courses may be changed through the first week of the term only. The action is official when approved by the dean of the College.

Cancellation of Courses

Metropolitan College reserves the right to cancel any course due to insufficient registration. In this event, students are given the option to transfer to another course or to have full tuition refunded.

Withdrawal from Courses

Withdrawal is the formal notification to the College by the student of the decision not to continue work in a course. Withdrawal is permitted at any time prior to the last ten days of the term. Failure to attend or notice to the instructor does not constitute withdrawal. A student must notify the College in writing or in person of the intention to withdraw.

Tuition Refunds

In order to receive a tuition refund, a student must officially withdraw from a course or courses. Upon approval of the withdrawal refunds are made on the basis of the following schedule:

Full tuition refund — made to persons who register in classes which have been cancelled or closed.

90% refund — written request received prior to the day of the first class meeting.

60% refund — written request received before the third week of the term.

40% refund — written request received before the sixth week of the term.

Refunds during the Summer Term and Short Courses

The conditions stated above also apply to the Summer term or courses less than 12 weeks in length, except that the following schedule applies:

90% refund — written request received prior to the day of the first class meeting.

40% refund — student withdraws before midpoint of instruction time or term has been completed (whichever is applicable). No refund is permitted after mid-point of instruction time or term.

GRADES

Students may choose either one of the two grading systems described below for any course taken. The two systems are (1) Letter Grade System and (2) Credit-No Credit System.

Letter Grade

A	High achievement; an unusual degree of intellectual initiative.
B	Above average achievement; work is definitely better than satisfactory.
C+	Indicates above average achievement, midway between a "C" and a "B".
C	Average achievement; the student grasps the essential objectives of the course.
D	Below average quality and achievement (a passing grade; repetition not required).
NC	Work not acceptable toward graduation requirements.
I	Interim grade assigned when coursework is incomplete at the end of term; to receive credit for the course, the student, with the approval of the instructor, must complete all required work within two terms; otherwise, no credit is given and NC is retained on transcript.
W	Officially authorized withdrawal from the course, initiated by student.
Au	Audit.
N	No grade; used when student never attended class but name appeared on class list.

Credit—No Credit

CR	Work satisfactorily completed.
NC	Work not acceptable toward graduation requirements; to receive credit, the student must obtain written consent from both the instructor and the Dean's office, and complete the coursework by a stipulated date; otherwise, no credit is given and NC is retained on the transcript.

Quality Points

Used to compute grade point average. For example, a three-hour course with the grade of A yields 12 quality points; if the grade were C, 6 points. The quality point average (or credit point average) is computed by dividing the total number of quality points by the total number of credit hours attempted. The total for credit hours includes those for all attempted courses with the final grade of A, B, C+, C, and D.

GRADUATION

Saint Louis University degrees are conferred in January, May and August. Students who anticipate completion of degree requirements must request certification by the Dean for graduation before the deadline announced in the class schedule. Students who are unable to attend the May ceremony or who graduate in January or August may make other arrangements to receive their certificate or diploma through the office of the Dean.

Bachelor's and Associate's Degree Requirements

Degrees are conferred only upon fulfillment of the following conditions:

1. Satisfactory completion of the total number of credits of college-level work required for the degree: 120 credits for Bachelor's degrees; 60 credits for the Associate's degree.
2. Completion of the last 30 credits of this total at Saint Louis University (45 credits for AAS students in the special Ladder Curriculum). This residency requirement may be waived in rare instances but only with special permission from the Dean.
3. Enrollment in an Area of Emphasis and satisfactory completion of the requirements for the Area.
4. Satisfactory completion of the Directed Electives requirement that at least 48 credits for the Bachelor's degree must be taken outside the degree program or Area of Emphasis in which the degree is sought. Students in Associate in Applied Science transfer program must satisfactorily complete all Ladder Curriculum requirements. See "Ladder Curriculum Program".
5. The average of all letter grades earned in coursework at Saint Louis University must be at least a C.
6. Payment of tuition and all applicable fees and fines, and return of all library and other loaned materials and equipment is required.
7. The applications for graduation must be officially certified for graduation by the Dean of Metropolitan College.

Graduation Honors

The graduation honors for Metropolitan College students are as follows:

Cum laude for a credit point average of 3.5
Magna cum laude for a credit point average of 3.7
Summa cum laude for a credit point average of 3.9

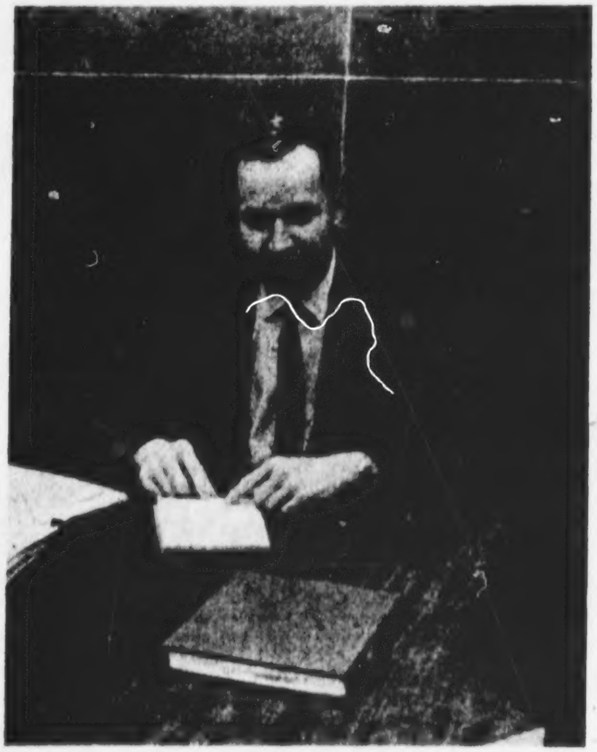
The following criteria are the basis for honors:

— At least 60 academic hours of graded courses at Saint Louis University.
— No more than six credit hours with the grade of "NC" during the period of time at Metropolitan College.

Averages for graduation honors are computed only on the basis of coursework taken at Saint Louis University.

The "NC" is designated for coursework not acceptable towards graduation requirements. The presence of an "NC" on a student's academic record is not necessarily indicative of inability to master the classwork, but may represent outside pressures or events which blocked efforts of the student to complete course requirements.

It is recognized, however, that academic honors should represent the highest award which can be designated by the University. Therefore, a stipulation has been made that no more than six credit hours graded "NC" be a part of the student's record.



METROPOLITAN COLLEGE ACADEMIC PROGRAMS

PROGRAMS	AREA OF EMPHASIS	DEGREES & CERTIFICATES
LIBERAL STUDIES	Communications, Humanities, Organizational Development, Psychology, Social Science, Theology	Bachelor of Liberal Studies and Associate of Liberal Studies
URBAN AFFAIRS and COMMUNITY SERVICE	Community Development Criminal Justice Urban Agency Operations Urban Government	Bachelor of Urban Affairs and Community Services & Associate of Urban Affairs and Community Services (Note: The Associate's Degree is not granted in Criminal Justice.)
MATERIALS MANAGEMENT	Materials Management	Associate in Materials Management
NURSING	Nursing	Bachelor of Science in Nursing (R.N. Transfer students only.)
CERTIFICATES	Accounting, Corrections, Credit Management, Data Processing & Systems Analysis, Finance, General Business, Gerontology, Industrial & Business Security Management, Industrial Relations, Management & Organizational Theory, Marketing, Materials Management, Production and Inventory Control.	Certificate (All courses are for credit and are applicable to a degree.)
PROFESSIONAL DEVELOPMENT and COMMUNITY SERVICE	Seminars, Workshops and Institutes for businesses, organizations, and individuals	Continuing Education Units (Not counted toward a credit certificate or degree.)
RADIOLOGICAL SCIENCES	Radiological Administration Radiological Science Education	Bachelor of Science in Radiological Sciences (R.T. Transfer Students only.)

DEFINITIONS OF COURSES

Required Courses

Courses specified by title or area which must be completed by *all* students seeking a degree in the respective Area of Emphasis or Certificate program.

Liberal Studies

Any Courses in Communications, the Humanities, the Social/Behavioral Sciences, Natural Sciences or Mathematics.

General Electives

Any course taken to fulfill the remaining requirements for a degree.

Directed Electives

Courses outside a student's Area of Emphasis or degree program, taken to ensure a broad and balanced education. These courses compliment and balance the selected Area of Emphasis.

METROPOLITAN COLLEGE
SAINT LOUIS UNIVERSITY

Metropolitan College will continue to confer the Bachelor of Busiess Studies on students admitted to the program prior to July 1, 1976 and who successfully complete all degree requirements as outlined in the Metropolitan College Bulletin under which they were admitted.

APPENDIX B

REFERENCES FOR THE FINANCIAL PORTION OF THE REPORT

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APPENDIX C

STUDENT SERVICES EVALUATION FORM

METROPOLITAN COLLEGE
SAINT LOUIS UNIVERSITY

STUDENT SERVICES EVALUATION FORM

In an effort to gather information on your perceptions of the College's services and to improve, where necessary, we are asking you to complete this questionnaire. All responses are anonymous and will be used only for the evaluation of the services named.

Where appropriate, check the set of parentheses which most accurately represents your judgment about the item in question. For example:

I understand the instructions ( ) (✓) ( ) ( ) ( ) I do not understand the instructions

(By checking that set of parentheses the respondent indicates the instructions are fairly clear; checking the next box to the left would have meant that they were absolutely clear.)

Instructions for other kinds of items are included with the item.

A. GENERAL INFORMATION

1. Major Field (circle one):
   - a. Business or Materials Management
   - b. Liberal Studies
   - c. Urban Affairs
   - d. Nursing
   - e. None of the above
2. Employment status (circle one):
   - a. Employed full-time
   - b. Employed part-time
   - c. Neither of the above
3. The year you first enrolled in Metropolitan College:
   19 ______
4. At which off-campus center have you taken most of your classes? (circle one response)
   - a. South (Lindbergh)
   - b. West (DeSmet)
   - c. North (McCluer)
   - d. I take classes at different centers because the instructor or course is more important than location.
5. Tuition assistance (circle one):
   - a. Employer reimburses 100% tuition
   - b. Employer reimburses 50% or more
   - c. Employer reimburses less than 50%
   - d. Employer does not have education benefit
   - e. Self-employed or not employed

B. ACADEMIC ADVISING

1. Each term I talk with academic advisor (including center directors):
   ( ) About once ( ) About twice ( ) Three times or more
2. The staff who give advice about academic programs appear to be:

a. well informed about the College's programs	( ) ( ) ( ) ( ) ( )	relatively uninformed about the College's programs
b. hard to get to see	( ) ( ) ( ) ( ) ( )	easy to get to see
c. very helpful	( ) ( ) ( ) ( ) ( )	not very helpful
d. lacking competence	( ) ( ) ( ) ( ) ( )	very competent

3. The staff doing advising and the procedures used are:

Better than last year (76-77)	( ) ( ) ( ) ( ) ( )	Worse than last year (76-77)

(Note: Leave blank if you were not enrolled last year.)

4. How much of the academic advising you received was valuable (circle one)?
   - a. none of it
   - b. a little of it
   - c. about half of it
   - d. most of it
   - e. all of it.

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5. The academic advising process would be better if. . .

C. REGISTRATION

1. The registration process is:

a. efficient	( ) ( ) ( ) ( ) ( )	inefficient
b. easy and simple	( ) ( ) ( ) ( ) ( )	difficult and complex
c. convenient	( ) ( ) ( ) ( ) ( )	inconvenient

2. Registration could be improved by. . .

D. COLLEGE PUBLICATION

1. The new College tabloid (newspaper):

a. is not very informative	( ) ( ) ( ) ( ) ( )	is informative
b. looks professional	( ) ( ) ( ) ( ) ( )	looks unprofessional
c. does not facilitate keeping up with courses and new programs	( ) ( ) ( ) ( ) ( )	helps a great deal in keeping up with courses and new programs

2. The tabloids could be improved if. . .

E. OVERALL SATISFACTION WITH THE COLLEGE

1. Please circle the number which most closely approximates your satisfaction with Metropolitan Colleges student services:

Extremely dissatisfied: 1 2 3 4 5 6 7 8 9 10 Extremely satisfied

F. FUTURE PROGRAMS

Below is a list of four programs that the College is considering initiating. Please indicate with a check (✓) whether (a) you would have participated in these programs if they had been available at the time you enrolled and (b) whether you would take advantage of them if they were available now.

(a) I would have participated at the time I enrolled	Program	(b) I would participate if the program were available now
________	A two-hour student orientation	________
________	Assessment of basic skills (reading, study habits, etc.)	________
________	Career counseling services	________
________	Communications skills courses	________

G. ADDITIONAL COMMENTS

Please add any comments you feel would be helpful in evaluating student services in the College.

PLEASE RETURN THIS SURVEY TO YOUR CENTER DIRECTOR

APPENDIX D

SURVEY QUESTIONS AND SUMMARY OF DATA FOR THE SURVEY OF SELECTED ST. LOUIS EMPLOYERS

Survey Questions and Summary of Data
for the
Survey of Selected St. Louis Area Employers

1. Have you heard of SLU's Metropolitan College?

Yes - 19 - 90.4%
No - 2 - 9.6%

2. Do you know what the Metropolitan College of SLU is?

Yes - 12 - 57%
No - 6 - 28.5%
Uncertain - 3 - 14.5%

3. Are you familiar with the non-traditional degree program concept?

Yes - 10 - 47.6%
No - 9 - 42.8%
Uncertain - 2 - 9.6%

4. Do you know any of the employees in your organization who have or are presently taking courses at Metropolitan College?

	General		Specific	Total
Yes	6 (29%)		7 (33%)	62%
No		5 (24%)		24%
Uncertain		3 (14%)		14%

5. Do you have any impressions of Metropolitan College?

Positive - 9 - 39%
Neutral - 1 - 4%
Negative - 3 - 13%
None - 10 - 43%
23

6. Do you know of any of your employees who are taking courses at any of the other colleges in the immediate area?

Yes - 18 - 85.7%
No - 3 - 14.3%

7. Where and how many?

All colleges and Jr. Colleges were mentioned. Only rarely were numbers of students available.

8. What is your company's policy on educational benefits for employees?

	% - 100	80	75	70	60	50	0
Reimbursement	N - 8	1	6	2	1	2	1

9. Do you restrict benefits in any way?

Job related or degree specific - 15
Unrestricted - 4
Salary Exempt Employees - 2
Remain with Co. - 1
Minimum Grade - 20

10. Generally, what level of your work force is receiving most of the tuition benefits being paid?

Clerical - 10
Supervisory - 8
Middle Management - 1
Executive Professionals - 3
All levels - 3

11. What benefits does your company expect to derive from subsidizing employee education?

Better Qualified and Productive Employees - 13
Better Morale - 4
Increase Promotability - 16
Recruitment Inducement - 4
A Social Responsibility - 3

12. Have there been any negative effects of your education policies?

Loss of Personnel - 10
Absence - 1
None - 10

13. What is your opinion, as an employer, of non-traditional degree programs in general?

	N	%
Positive	9	42.9%
Negative	1	4.1%
Neutral	4	19.0%
None	7	33.0%

14. How do you feel about students receiving college credits for learning through experience?

	N	%
Approve	14	66%
Disapprove	1	5%
Skeptical	3	14%
No Opinion	3	14%

15. Does your company have training programs?

Yes - 19
No - 2

16. Do you think any of these are college equivalent?

Yes - 3
No - 12
Uncertain - 6

17. When you are hiring for a position, is it more important for a prospective employee to have extensive knowledge of theory, gained in the classroom, or to have acquired hands-on experience?

Depends on Position - 7
Theory - 5
Experience - 9
Both - 5

18. Does the source of a degree play any part in the decision to employ or promote a person?

Yes - 4 - 19%
No - 17 - 81%

19. As a policy, does promotion or salary increments depend on educational level of employee?

Yes - 3   Yes, at entry - 2
No - 16

20. Does this vary in any way depending on the level of employment?

Yes - 2
No - 19
Merit System - 13

21. Have you had any experience with either graduates or students from a non-traditional degree program applying for employment?

	Graduates	Students
Yes	1 (5%)	8 (38%)
No	16 (76%)	9 (43%)
Uncertain	4 (19%)	4 (19%)

22. In the past; have you hired anyone who has graduated from a non-traditional degree program?

Yes - 1 - 5%
No - 15 - 71%
Uncertain - 5 - 24%

23. As a matter of policy, would your company rather educate and promote from within (current employees) or do you normally seek to fill positions which require a degree, from outside the company?

Within - 18 - 86%
Without - 0 -
Both - 3 - 14%

24. Do you know of any instances of an employee being promoted or transferred laterally after graduation from a non-traditional degree program?

Yes - 4 - 19%
No - 15 - 71%
Uncertain - 2 - 10%

25. How does the quality of a non-traditional degree program compare with more traditional programs?

Comparable - 6 - 29%
Better - 3 - 14%
Inferior - 1 - 5%
No Opinion - 11 - 52%

26. Do you think non-traditional programs are too unstructured? Or, too easy?

	Too Unstructured?	Too Easy?
Yes	0	0
No	9 (43%)	8 (38%)
No Opinion	12 (57%)	13 (62%)

APPENDIX E

METROPOLITAN COLLEGE ALUMNI SURVEY - 1978

Alumni Survey - 1978

METROPOLITAN COLLEGE
SAINT LOUIS UNIVERSITY

A. Background Information

Sex: ☐ Man ☐ Woman

Ethnic Background:

- ☐ American Indian
- ☐ Asian or Pacific Islander
- ☐ Black
- ☐ White
- ☐ Hispanic
- ☐ Other: ______________

Degree:

- ☐ Business
- ☐ Liberal Studies
- ☐ Urban Affairs
- ☐ Nursing

Year Graduated: __________

B. Educational Goals

	At the time you enrolled in the College, this goal was:			Sometime after you enrolled in the College, this goal was:			
	Not Important	Somewhat Important	Very Important	Reached	Not Reached	Undecided	Not A Goal
a. To improve my chances of good pay and/or promotion in my career	☐	☐	☐	☐	☐	☐	☐
b. To obtain the credential which would make me eligible to receive the right pay for the work I already was (am) doing	☐	☐	☐	☐	☐	☐	☐
c. To develop a NEW career	☐	☐	☐	☐	☐	☐	☐
d. To qualify for a professional license	☐	☐	☐	☐	☐	☐	☐
e. To improve my job skills and my ability to perform my work	☐	☐	☐	☐	☐	☐	☐
f. To obtain the credential which would qualify me for the kind of jobs I really wanted	☐	☐	☐	☐	☐	☐	☐
g. To learn more about the subject area simply because I was interested in it	☐	☐	☐	☐	☐	☐	☐
h. To feel the enjoyment and have the experience of learning on my own	☐	☐	☐	☐	☐	☐	☐
i. To have the satisfaction of having the degree	☐	☐	☐	☐	☐	☐	☐
j. To obtain prerequisites for entry into a higher level degree program	☐	☐	☐	☐	☐	☐	☐

C. Benefits from the degree:

Of all the ways you may have benefited from obtaining this degree, which two do you feel were the most important?
(Put "1" in the box of the most important; "2" in the box of the second most important)

a. ☐ The satisfaction of having the degree.

b. ☐ Having the degree as a credential towards job opportunities I might not otherwise have had.

c. ☐ The enjoyment and experience of learning on my own.

d. ☐ Having the degree as a "stepping stone" to go on for more education or training.

e. ☐ Being more skilled and better at performing my work.

f. ☐ Other (Please give details): ____________________

g. ☐ I do not feel I benefited from this degree in any respect.

D. Personal gains from your Metropolitan College experiences:
How much did you gain in each of the following areas as a direct result of the experiences you had earning this degree? (Check one box for each area.)

	Not At All	A Little	A Moderate Amount	A Considerable Amount	A Very Large Amount
a. "Intellectual curiosity;" discovering and enjoying knowledge	☐	☐	☐	☐	☐
b. An increased appreciation and use of fine arts and humanities	☐	☐	☐	☐	☐
c. The ability to carry out duties and responsibilities related to the work I do (or hope to do)	☐	☐	☐	☐	☐
d. Sense of personal achievement and self-satisfaction	☐	☐	☐	☐	☐
e. The ability to learn and work on my own	☐	☐	☐	☐	☐
f. Understanding my own abilities, limitations, and interests	☐	☐	☐	☐	☐
g. The ability to think analytically; to break down an experience into its basic parts	☐	☐	☐	☐	☐
h. The ability to write well	☐	☐	☐	☐	☐
i. The ability to speak well in public	☐	☐	☐	☐	☐
j. Other (write in) ____________________	☐	☐	☐	☐	☐

E. Your Metropolitan College (St. Louis U.) degree compared to other degrees:
How do you think the following would rate your Metropolitan College degree in comparison to other non-traditional degree programs (e.g., Webster, Lindenwood IV)?

	Less Valuble	Just As Valuable	More Valuable	Don't Know	Doesn't Apply
a. Yourself	☐	☐	☐	☐	☐
b. Your present (or most recent) employer	☐	☐	☐	☐	☐
c. Your present (or most recent) co-workers	☐	☐	☐	☐	☐
d. Graduate or professional school	☐	☐	☐	☐	☐

How do you think the following would rate your Metropolitan College degree in comparison to other established degree programs (e.g., other St. Louis U. undergraduate schools, UMSL, Washington U.'s University College)?

	Less Valuable	Just As Valuable	More Valuable	Don't Know	Doesn't Apply
a. Yourself	☐	☐	☐	☐	☐
b. Your present (or most recent) employer	☐	☐	☐	☐	☐
c. Your present (or most recent) co-workers	☐	☐	☐	☐	☐
d. Graduate or professional school	☐	☐	☐	☐	☐

F. Employment before and after graduation:

PRINCIPAL OCCUPATION CLOSEST TO YOURS (check one in each category):	Category I Before Graduation	Category II After graduation
Student	☐	☐
Homemaker	☐	☐
Retired	☐	☐
Clerical, office worker	☐	☐
Laborer, machine operator, driver	☐	☐
Artist, skilled trade or craftsperson	☐	☐
Sales/service	☐	☐
Supervisor, middle management, teacher, proprietor	☐	☐
Executive, top management, professional	☐	☐
PRIMARY SETTING IN WHICH YOU WORK (check one in each category):		
Business/industry	☐	☐
Primary/secondary education	☐	☐
Post-secondary education	☐	☐
Military	☐	☐
Health care	☐	☐
Government/community service	☐	☐
Religious	☐	☐
JOB TITLE	________________	

Below are job related changes which could have resulted from completing your degree at Metropolitan College. Please indicate for each item whether you expected the change and whether the change actually happened.

Changes	**Expected**		**Happened**	
	Yes	**No**	**Yes**	**No**
a. A change to a different job.	☐	☐	☐	☐
b. A promotion or increase in pay.	☐	☐	☐	☐
c. An increase in job responsibilities.	☐	☐	☐	☐
d. An increase in job security.	☐	☐	☐	☐
e. An increase in status or respect from employer/coworkers.	☐	☐	☐	☐

If you tried to obtain new or different employment after graduating, did you experience any problems because of the degree from Metropolitan College?

☐ Yes ☐ No ☐ Not applicable

If you answered "yes" to the above question, please check all reasons why you encountered problems:

a. ☐ Even after finishing the degree I did not have the required skills or training for the job.
b. ☐ The non-traditional credit I earned made it hard for the employer to judge the amount or type of college work I had done.
c. ☐ The employer did not seem to value the degree as highly as a traditional degree.
d. ☐ The employer did not seem to care at all about college degrees in general.
e. ☐ Other reason (please explain): ________________________________

____

____

____

G. Post-Graduate Education.

Have you applied for admission to any graduate or professional schools?

☐ YES (Complete the remaining questions in this section)
☐ NO (Go to section H.)

Please list each institution and program to which you applied and your admission/enrollment status.

Institution	Program or Major	Admission/Enrollment Status (1 = admitted & enrolled, 2 = admitted, did not enroll, 3 = pending, 4 = not admitted)
________________	________________	________
________________	________________	________
________________	________________	________

Do you believe you experienced special problems with graduate or professional school because you graduated from Metropolitan College?

☐ **Yes** ☐ **No**

If you answered "yes" to the preceding question, indicate whether any of the following was a problem:

	Not a problem	Somewhat of a problem	A major problem
a. Quality of my Metropolitan College degree program	☐	☐	☐
b. Graduate or professional school could not understand my Metropolitan College credits	☐	☐	☐
c. Lacked required courses	☐	☐	☐
d. Low standardized test scores	☐	☐	☐
e. Other (please explain) ____________	☐	☐	☐

H. Satisfaction

Please indicate the degree to which you are satisfied with each of the following (check one for each item):

	Very Satisfied	Satisfied	Not at all Satisfied	No Opinion
a. The overall quality of your educational program	☐	☐	☐	☐
b. The quality of your Metropolitan College degree	☐	☐	☐	☐
c. The way Metropolitan College meets the needs of the community (and its students)	☐	☐	☐	☐

Please add any comments you have about your Metropolitan College program or about your post-graduation experiences.

METROPOLITAN COLLEGE
SAINT LOUIS UNIVERSITY

APPENDIX F

DATA FROM THE OUTCOMES STUDY

Importance and Attainment of Educational Goals

Goal	Importance			Attainment			
	Not	Somewhat	Very	Reached	Not Reached	Undecided	Not a Goal
Career Improvement	10.5%	22.1%	66.3%	48.8%	23.3%	8.1%	12.8%
Credential for present work	44.2	16.3	31.4	27.9	18.6	3.5	32.6
Develop new career	40.7	25.6	23.3	19.8	19.8	5.8	38.4
Qualify for professional license	75.6	8.1	5.8	7.0	5.8	0.0	68.6
Improve job skills	16.3	26.7	50.0	60.5	1.0	11.6	12.8
Credential for desired work	19.8	17.4	58.1	44.2	18.6	5.8	18.6
Interest in subject area	17.4	45.3	31.4	54.7	3.5	5.8	21.0
Enjoyment of learning	24.4	33.7	33.7	59.3	1.0	3.5	19.8
Satisfaction of having the degree	5.8	22.1	65.1	81.4	0.0	1.0	3.5
Obtain prerequisites for entry into higher level degree program	20.9	36.0	37.2	58.1	7.0	5.8	14.0

Observations

-Highest salience: career improvement and about 3/4 of those seeing it 'very important' reached that goal.

-High salience: satisfaction from having degree; attainment exceeded importance.

-Credentialing for new/desired work more important than for present work, but goal attainment re: desired work less than importance.

-Enjoyment of learning not high priority.

Inferences/Implications

-Graduates appear definitely career oriented, especially toward credentials for desired work. Most goals generally attained except for credentialing for desired work and developing new career.

Interest, enjoyment of learning, etc., appears to have been stimulated according to the attainment ratings compared to goal importance ratings.

Ways Benefited From the Degree

Benefits	Most Important	Second Most Important
Satisfaction of having the degree	25.4%	37.2%
Credential toward new job opportunities	51.2%	17.4%
Enjoyment of learning	4.7%	9.3%
"Stepping stone" for more education	25.6%	19.8%
Improved job skills at present work	5.8%	22.1%
Other (write in)	1.0%	1.0%
No benefits	0.0%	3.5%

Observations	Inferences/Implications
-Credentials for new job opportunities most important benefit for 1/2 the graduates.	-Both conforms to and slightly contrasts with data in Table 2. Conformity in that new credentials are an important goal and generally a benefit of the degree for 1/2 respondents. Contrasts in that Table 2 shows slightly less attainment than importance.
-Satisfaction of having the degree second most important benefit.	-Supports finding reported in Table 2.
-"Stepping stone" for more education second most important benefit for many.	-New information, yet they still do not enjoy learning. (Further education for utilitarian purposes?)
-Enjoyment of learning not seen as important benefit.	-Even though attained (Table 2) enjoyment of learning is not valued.
-Improved skills at present work seen as of secondary importance.	-Consistent with data in Table 2. suggesting learning goals have to do with preparing for new or different jobs.
-Few claimed no benefits.	-Most feel enriched in some way by having earned a degree through Metropolitan College.

Author's Note: Columns exceed 100% total because some respondents indicated two items of equal importance.

Personal Gains From Metropolitan College Experience

Personal Gains	None	Little	Moderate	Considerable	Very Large
Intellectual curiosity	1.0%	11.7%	23.3%	48.8%	14.0%
Increased application of fine arts and humanities	10.5%	33.7%	33.7%	14.0%	9.3%
Ability to carry out work duties and responsibilities	12.8%	11.7%	31.4%	23.3%	16.3%
Personal achievement/ satisfaction	0.0%	4.7%	8.1%	27.9%	58.1%
Ability to learn and work on own	16.3%	14.0%	25.6%	22.1%	17.4%
Understanding own abilities, limitations, and interests	4.7%	14.0%	24.4%	33.7%	18.6%
Analytic thinking	8.1%	17.4%	20.1%	30.2%	19.8%
Writing ability	10.5%	26.7%	29.1%	22.1%	9.3%
Public speaking ability	12.8%	29.1%	26.7%	19.8%	9.3%
Other (write in)	0.0%	1.0%	2.3%	2.3%	5.8%

Observations	Inferences/Implications
-Largest gain was personal achievement/satisfaction.	-Too general to have much meaning.
-Intellectual curiosity stimulated to a considerable degree for half the graduates.	-What's the use if they don't value it? Does this serve mainly an entertainment function? Utilitarian?
-Comparatively few benefits claimed re: fine arts, humanities, writing, speaking, etc.	-Is Metropolitan College supposed to be doing these?
-Learning and working on own, understanding self, abilities, limitations, interests claimed as moderate or considerable benefits.	-Maybe important benefit of College experience is more in general personal growth than in academic content areas?
	-Trends difficult to tease out here. Maybe collapsing the ratings or combining some gains according to common factor would help.

Graduates Perceptions of Metropolitan College Degree

Compared to Other Non-Traditional Degree Programs

Rater	Less Valuable	Just As Valuable	More Valuable	Don't Know	Doesn't Apply
Graduate[1]	0.0%	33.7%	44.2%	12.8%	1.0%
Employer[2]	1.0%	36.0%	29.1%	16.3%	9.3%
Co-Workers[2]	0.0%	34.9%	31.4%	16.3%	8.1%
Graduate or Professional School[2]	4.7%	26.7%	23.3%	33.7%	3.5%

Table 5.

Graduates' Perceptions of Metropolitan College Degree

Compared to Other Established Degree Programs

Rater	Less Valuable	Just As Valuable	More Valuable	Don't Know	Doesn't Apply
Graduate[1]	17.4%	55.8%	9.3%	7.0%	1.0%
Employer[2]	7.0%	55.8%	2.3%	17.4%	7.0%
Co-Workers[2]	9.3%	45.3%	2.3%	23.3%	8.1%
Graduate or Professional School[2]	24.4%	25.6%	3.5%	32.6%	2.3%

[1] Self-rating.

[2] These are ratings based on how the graduate thought the degree would be rated by employer, co-workers, and graduate or professional school.

Observations	Inferences/Implications
-Degree seen generally just as valuable as, or more valuable than, other non-traditional programs, but some doubts appear when compared to other established programs.	-How does this affect the College's marketing objectives and strategies?
-Biggest doubt appears re: graduates' perceptions of graduate or professional school ratings.	-Question is: Do they get admitted when they apply?

Employment Before and After Graduation

	Before Graduation	After Graduation
Occupation:		
Student	11.6%	3.5%
Homemaker	4.7%	2.3%
Retired	1.0%	2.3%
Clerical, Office Worker	16.3%	8.1%
Laborer, Machine Operator, Driver	4.7%	3.5%
Artist, Skilled Trade, Craftsperson	5.8%	1.0%
Sales/Service	5.8%	4.7%
Supervisor, Middle Management, Etc.	41.9%	47.7%
Executive, Top Management, Professional	13.0%	30.2%
Work Setting:		
Business/Industry	53.5%	48.8%
Primary/Secondary Education	2.3%	1.0%
Post-Secondary Education	2.3%	3.5%
Military	0.0%	0.0%
Health Care	4.7%	4.7%
Government/Community Service	32.6%	30.2%
Religious	3.5%	3.5%

Observations	Inferences/Implications
-Slight decrease in all but three occupational categories after graduation.	-Suggests general upward mobility job-wise upon graduation, especially into middle and upper management levels but ----
-Slight increase in movement into middle management and dramatic increase into top management, professional, etc., after graduation.	
-No significant changes in work setting.	----probably are internal promotions rather than movement across industries

Expected and Actual Job Changes
Resulting From Metropolitan College Degree

Changes	Expected?		Happened?	
	Yes	No	Yes	No
Different Job	55.8%	36.0%	51.2%	37.2%
Promotion/Pay Increase	61.6%	29.1%	52.3%	32.6%
Increased Job Responsibilities	63.5%	36.0%	52.3%	30.2%
Increased Job Security	41.9%	45.3%	37.2%	45.3%
Increased Status/Respect From Employer/Co-Workers	60.5%	30.2%	62.0%	23.3%

Observations	Inference/Implications
-Expectations and actual outcomes highly consistent across the board.	-Many of those who expected job changes, promotions, etc., probably got them, and those who did not, did not. -Unclear if different job was with same employer or a new job with different employer. -Hard to attribute these changes to the College experience or degree, i.e., they may have happened anyway.

Overall Satisfaction With Metropolitan College

Characteristic	Very Satisfied	Satisfied	Not At All Satisfied	No Opinion
Quality of Educational Program	29.1%	64.0%	3.5%	1.0%
Quality of the Degree	26.7%	65.1%	2.3%	3.5%
The way the College meets needs of the community (and its students)	34.9%	47.7%	4.7%	10.5%

Observations	Inferences/Implications
-90% are "satisfied" to "very satisfied" with the quality of their program and degree.	-Obvious.
-80% feel similarly about the way the College meets the needs of the community (and its students).	-The difference between this and the above can be accounted for by the "no opinion" ratings.

FIGURE 12

ADDITIONAL OUTCOMES

(No accompanying tables)

New Employment

Observations	Inferences/Implications
-Only 3.5% claimed to have tried to obtain new employment. The remainder indicated they did not, or the question was not applicable. (No=38%) (NA=53%)	-Confirms that most of the changes in Table 7 occurred within the same work setting.
	-Graduates previously claimed (Tables 1 and 2) that credentialing for new jobs or careers was both important to to some extent achieved. But issue raised by response to this item is: Did they try for new positions or careers outside their present work environment?

Post-Graduate Education

Observations	Inferences/Implications
-48% of respondents applied for admission to graduate or professional school. Of these, 83% were admitted and enrolled (usually in the institution of their first choice).	-Most of the College's graduates who apply for graduate school are admitted and perform acceptably (most reported they had graduated).
-Most (N=15) who were admitted and enrolled went into a Saint Louis University master's program (usually MBA) or into a master's program at Webster (N=13). The remainder went to nearby state universities, a theological seminary, special institute or law school.	-The College's parent institution (Saint Louis University) and other local universities (especially the "non-traditional" programs) apparently readily accept Metropolitan College graduates.
-15% of those admitted and enrolled saw the quality of their program as "somewhat" limiting them in graduate school.	-Major problems of graduates functioning in graduate school are few, given where they apply.

FIGURE 13

OVERVIEW OF WRITE-IN COMMENTS

Observations	Inferences/Implications
-40% added comments in sufficient detail to add meaning.	
-Positive comments outweighed negative comments by 1.5 to 1. Most of the comments were general lauditory statements concerning the quality of the education, faculty, etc.	
-Many questionnaires contained an expression of gratitude for an opportunity to learn that would not have been possible in any other way. For example, "I wouldn't have completed my degree if it were not for Metro." Others cited job advancement and good preparation for graduate school.	-Metropolitan College appears to be meeting a specialized need.
-Criticisms most often had to do with the title or label of the degree, poor advising or misinformation upon entering, and the curriculum content, with occasional mention of low standards and poor teaching quality.	-Some questioning of the prestige value of a degree, that is, not a BA or BS.
-Some additional specific courses or learnings were suggested, e.g., basic skills--math, writing, speaking, thinking, etc.	

Quality and Higher Learning

An entire book could probably be written on the topic of quality in higher education. In colonial times it might have been simple to define quality--a learned, respected teacher who felt that strong discipline was essential to good learning, and who was of strong Christian character could well have represented quality. As the country grew and diversified, higher education became more complex. This complexity not only resulted in debates about the appropriate nature of and proper role for higher education but also led to considerable confusion about what constituted quality. An institution strongly grounded in the German tradition surely had a different notion of quality than one with roots in the English tradition.

As higher education diversified it was clear that quality meant different things to different institutions. A small private college with strong ties to the church, a research institution like Johns Hopkins, a land grant school, and an ivy league college all had slightly to vastly different notions of what constituted a proper and, therefore, quality education.

The land grant university was one of the early examples of the development of different institutions for different people. With development of the land grant system there appeared a class of institutions which was looked upon differently than the classical, continental or English college because its role and clientele differed significantly.

The comparison of land grant colleges to those of Euro-English decent by many classical educators must have resulted in the judgment that the highest quality was in the latter. Why? Well, for one thing the curriculum in the established institutions closely resembled an interpretation of the proper course of study for students of higher learning. The view of the land grant colleges was that they served an important vocational function and that such a function was a necessary role in society at that time, but the carrying out of that function should not be confused with quality in classical (or traditional) higher education.

With the coming of the 20th century and even further diversity in the higher learning, the debated about and confusion over quality became more public and more intense. It appears that judgements of quality in the early approaches to accreditation were based largely on structure and content. That is, the curriculum, the faculty, finances, and so forth were the critical elements in judging quality. There were (and perhaps are) less formal criteria applied by others. There was a tacit societal assumption in the first half of this century that the cost of education was directly related to the quality of the education. There was also a value placed on size (e.g., student:faculty ratio) in that fewer had to be better (assuming, of course, that the faculty had good credentials). From this, there is the sense that the definition of quality rests with the characteristics of an institution. There was little or no attention given to the ways institutions operated or to their outcomes.

Several changes have taken place over the last few years in the perspective on quality. One of these involves expanding the concept of quality from a static or stationary notion to an active, dynamic one. One example of this change in action was the involvement of students evaluating teaching. Twenty years ago an evaluation of the course might have taken the form of (a) reviewing the text to be used, (2) checking the syllabus for content, logical structure, and comprehensiveness, and (3) being certain that the instructor was properly trained and educated to qualify as the professor. Students, however, felt that even though many of the qualities were present, it did not necessarily guarantee a good course (the definition of "good" is certainly open to debate, however). On many campuses the students initiate an assessment process aimed at providing information about their experiences in a course. The student's involvement added a dimension to the assessment of quality in curriculum moving the process beyond simply looking at the static dimensions of courses.

Second, the accreditation process (looked at in more depth in a subsequent section) is generating some important changes. The major change is the acknowledgment that higher education is a pluralistic system. Previously, in many cases a common set of standards was applied to all institutions in the process of making judgments about the quality of education provided. Now, however, accreditation judgments rely much heavier on the particular institution's mission and goal statements and the comparison of these statements to actual structure and function. As a result, there is emphasis on clear statements of the purposes of the institution and on evidence that the structure of the institution and its programs are logically and empirically related to those guiding statements. Such an approach values diversity among different types of institutions as well as variances among institutions within the same category.

A third trend in the definition of quality, if not quite accepted in the assessment of it, is an orientation to outcomes. Historically, educators and the general populus relied heavily on assumptions about the relationship between structure and actual outcomes. The current trend is toward asking whether, in fact, certain program characteristics, faculty, and institutional restructures produce predicted (and desirable) results. It is not a trend which has been welcomed with open arms. For one thing, institutions and faculty are concerned about the possibility that actual outcomes do not correlate highly with intended outcomes. There is considerable anxiety about the consequences if that were the case. Related to this concern is the fact that higher education lacks outcomes measures which have proven validity and reliability for some areas. The lack of proven measures adds anxiety to an already delicate question. Resolution to this dichotomy is not likely to be quick or easy. It seems encouraging, however, that increasing numbers of educators are interested in and willing to pursue the issues of outcomes of higher education.

The trends noted above offer some indication of emerging directions for the study of quality in higher education. The view of the concept of quality as an active (as well as static) phenomenon, the relativism of the definition of quality reflected in new approaches to accreditation, and the extension of assessment of quality to outcomes of education--provide some benchmarks against which this project can be measured for an indication of its contribution to developing directions in the assessment of quality.

Accreditation and Non-Traditional Programs

The rapid growth of non-traditional educational endeavors has increased the pressure to ascertain the quality of such programs. Determining the quality of these programs is not only a result of pressures from institutions themselves but also reflects increased concern for the consumers of non-traditional education (and the consumers of its products).

In response, accrediting agencies have renewed efforts to modify their assumptions and approaches. Thrash reports two major goals of the Commission on Institutions of Higher Education of the North Central Association.

> ...To encourage innovation that is consistent with institutional goals (and)... to develop new evaluative tools and appropriate measures of quality so that assurances can be provided to the students and to the educational community that valid learning opportunities are offered. (1975, p. 324)

There has been an attempt to move from a model based on assessing pre-set standards to one which is "open-ended, that utilizes an inquiry model, and that encourages continuing interaction between the institution and the Commission (Thrash, p.324)."

According to the FRACHE Commission's report entitled, "The Interim Statement on Accreditation and Non-Traditional Study," there should be several adjustments in the accreditation process:

1. There should generally be a movement toward the assessment of the results of education, but in a manner that allows outcomes to be interpreted in relation to the environment and educational processes involved;
2. If institutions abandon or simply cannot apply traditional criteria or standards, then they must accept responsibility for proposing alternative ways of assuring quality;
3. Accreditation procedures must meet the criteria of flexibility, fairness, comprehensiveness and committees should include persons who are well-qualified in the area of non-traditional programs.

As work on the issues continues the questions become more specific. North Central's Executive Board raised numerous questions about the structure of accreditation of various kinds of non-traditional programs (see Thrash, 1976, pp. 281-82). In responding to those questions and in attempting to develop guidelines for alternative programs, the following kinds of information and evidence were suggested:

- Description and analysis of the program
- Stated purposes of the program
- The relationship of the program to institutional purposes and goals
- Explanation of contractual relationships with other agencies
- The qualifications of faculty
- Academic support services
- Student assistance programs
- Program monitoring and evaluation systems

Regardless of the status of standards, the emerging purposes of evaluation, or the kinds of evidence sought, it is generally agreed that as Dr. Thrash says, "... it is clear that additional ways of evaluating non-traditional efforts are appropriate (1975, p. 326)."

Compounding the difficulty inherent in issues of roles of accreditation, standards, and so forth are the more generic issues underlying the accreditation process. In the next section two points of view are presented. One defines the accreditation process by identifying twelve myths about accreditation. The other represents some negative criticism.

An article, "The Myths of Accreditation," by Robert Kirkwood (1973) takes a position that regional accreditation is less effective than it can (or out to) be because of misconceptions held about the process. Kirkwood cites what he feels are the twelve most serious myths and responds to each on the basis of his preception of accreditation--how it is or how it could be.

Three of the myths most relevant to this discussion are presented along with a synopsis of the author's view toward each.

- Accreditation is an end in itself.

  Many institutions think they have reached a "safe" area once accreditation is achieved or renewed. According to Kirkwood, accreditation is a means, not an end. The activities of planning, self-study, assessment, etc., should strengthen the quality of an institution via-a-vis its programs.

- Self-study is extraneous to an institution's ongoing needs and activities.

  The problem, in Kirkwood's view, is the manner in which the requirement is viewed and used, not the qualities endemic to the process. The strengths include the fact that it causes some institutions, which might not otherwise do so, to take a serious look at themselves. In addition, a self-study "soundly conceived and carefully executed" is an excellent tool for planning and operations research.

- Accreditation stifles innovation.

  That innovation has occured is not questioned, neither is the fact that it is sometimes stifled. The source of the constraints on innovation is the issue. In this case it is proposed that administrators and faculty members are the ones who are unwilling to allow changes to take place. As a means to maintain the status quo, these groups contend that any radical change would endanger accreditation.

Other myths discussed by Kirkwood pertain to admissions policy, faculty credentials, degree requirements, libraries, interinstitutional cooperation, acceptability and transfer of credit, the organization of accreditation, and the control of it.

Two points seem pertinent to the myths of accreditation. First, there exist a number of incorrect interpretations of the nature of and guidelines for accreditation. In others, the difficulties are a result of the institutions themselves which either incorrectly use the tools of accreditation or use the "myths" of accreditation to perpetuate the status quo. As a result, the accreditation process and the commissions through which it is administered are deemed less a barrier than many institutions might contend.

There is, however, a strong opposing view from some people in institutions. For these people the problems are as great as Kirkwood's opportunities. Two articles (Haywood, 1974; Kells, 1976) provide the basis for some criticisms of the accreditation process.

- The lack of agreement about the specificity or flexibility of standards causes institutions problems.

  In many areas there are no clear-cut standards. In others there is no consistent evidence that the standards are at all relevent to good education. Some standards are vague, some are exceedingly subjective; others are socio-political

- Accreditation hinders and sometimes prevents innovation in higher education.

  In contrasts to Kirkwood's assertion, some contend that accreditation activities protect the status quo, resist changes, lead institutions to strive to appear conventional (see Haywood, p. 227). This may, however, be somewhat misleading (although it clearly occurs) because of the kind of accreditation about which one talks. This point will be discussed later.

- The current modes of accreditation tend to cause one to two years of hectic self-study activity at considerable cost to the institution.

  There is no doubt that in many cases this happens and that both characteristics are problems. It is not the case that accreditation can occur without effort expended and resources invested. It does not, however, have to result in a brief period of concentrated activity nor in such large direct and indirect costs.

- The current, popular self-study format is archaic and limiting.

  In addition to the characteristics cited above (time consuming and expensive), the self-study format is largely descriptive which does not fit what might be some study formats oriented toward problem solving. The fact seems to be that the traditional format for accreditation reporting is not compatible for some new approaches to quality assessment.

  The format and content of most self-study reports are largely descriptive and as such lack data on actual performance in relation to goals and objectives.

- Institutions and their facilities and administrations misconstrue accreditation.

  Many administrators and faculty are judged to be naive about accreditation and, even more, to lack the confidence to live through peer reviews of their work. As a result of the misunderstanding, many institutions use inappropriate or irrelevant measures in their self-study.

- Accreditation activities, historically, have focused on structures and processes rather than products.

  A radical shift in the other direction would be equally faulty. Rather a balance among the various aspects of an institution's or program's characteristics and outcomes seem most desirable.

Many of these criticisms are contentions made by non-traditional programs especially at the beginning of this decade. The times are changing, however, and we need to look at the implications for non-traditional programs.

In general, it is not clear whether the problems with accreditation are primarily attributable to the commissions and agencies or institutions. Literature generated by one group tends to point toward the other. It should be noted, however, that the articles critical of the accreditation process devoted several points to the problems created by the institutions themselves. It is more likely than not that the problem is a mutual one, not resolvable by either on its own. Since institutions value autonomy and accrediting commissions (especially regional) try to respect that value, the first moves may have to be made by the institutions. At the same time, institutions will have to overcome the fear of peer evaluation and its consequences.

A second problem is the use of the term "accreditation" as though all types of it were the same. The philosophy, procedures, and current trends in regional accreditation are quite different from those in specialized or professional accreditation. Based on informal reports and some direct experience, the specialized or professional accrediting associations will present a greater challenge to non-traditional programs than will the regional commissions.

Beyond those general issues is the approach to regional accreditation in the past, i.e., self-study. Several recommendations emerge from the literature:

1. The content and procedures for self-study should adopt problem-solving or evaluation (program) approaches in order to have the process conform to the objectives.
2. The outputs of self-study should, therefore, be less descriptive and more improvement/evaluative in nature; more product and less process oriented.
3. It should be ongoing rather than one-shot (i.e., one or two years out of every ten) and should probably culminate in a review every five years.

There are, of course additional recommendations which might be made. These represent a sufficient number and especially the kind of recommendations which need to be considered in this project.

No accreditation mountains will be moved by the current effort, the project may incorporate some of the recommendations and serve, over the next few years, as an example of the kind of activity which could occur in the process of self-study and accreditation.